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DUSAN, FLEATE SEARCH REQUEST FORM Emily Bernhardt Serial Number: \_\_ Phone: Art Unit: Search Topic: Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s). ex Claim / Point of Contact: Susan Hanley Technical Info. Specialist CM1 12C14 Tel: 305-4053 LI

Requestor's

Name:

FO-1590 (9-90)

2/28	STAFF USE ONLY	
Date completed: 3/7-	Search Site	Vendors
Searcher: + anling	STIC	IG
Terminal time:	CM-1	STN
Elapsed time:	Pre-S	Dialog
CPU time:	Type of Search	APS
Total time:	N.A. Sequence	Geninfo
Number of Searches:	A.A. Sequence	SDC
Number of Databases:	Structure	DARC/Questel
	Bibliographic	Other

#### => d his

1.

```
(FILE 'HOME' ENTERED AT 18:05:11 ON 07 MAR 2002)
     FILE 'HCAPLUS' ENTERED AT 18:05:21 ON 07 MAR 2002 ~
           107 S LAVIELLE G?/AU
L1
L2
            332 S MULLER O?/AU
L3
            456 S MILLAN M?/AU
            54 S BROCCO M?/AU
L4
            31 S DEKEYNE A?/AU
L5
           880 S L1-5
L6
                                                         -Inventor Search
             1 S L6 AND DIPHENYLUREA
L7
               SELECT RN L7 1
     FILE 'REGISTRY' ENTERED AT 18:07:17 ON 07 MAR 2002
L8
            58 S E1-58
     FILE 'HCAPLUS' ENTERED AT 18:07:49 ON 07 MAR 2002
       1 S L7 AND L8 / cite w 58 april displayed
     FILE 'REGISTRY' ENTERED AT 18:10:08 ON 07 MAR 2002
L10
               STR
L11
               SCREEN 1994 AND 1839 AND 2004
             1 S L10 AND L11
L12
L13
               STR L10
             0 S L13 AND L11
L14
           218 S L13 AND L11 FUL 218 op do in parent search
SAVE L15 BER278P/A
L16
               STR L13
L17
          118 S 116 SSS FUL SUB=L15 U8 CPM in Subset Search
              2 S L16 SSS SAM SUB=L15
L18
     FILE 'REGISTRY' ENTERED AT 18:53:29 ON 07 MAR 2002
     FILE 'HCAPLUS' ENTERED AT 18:53:39 ON 07 MAR 2002

23 S L18 23 C. +CS for L18 cpds (ncludes Appl. 15

22 S T19 NOT 1.9 22 C. +CS

Work
L19
L20
     FILE 'CAOLD' ENTERED AT 18:57:36 ON 07 MAR 2002
           0 s Li8 no cites
L21
     FILE 'BEILSTEIN' ENTERED AT 18:57:55 ON 07 MAR 2002
             9. S L13 FUL
L23
             4 S L15
             5 S L22 NOT L23
             4 S L16 SSS FUL SUB=L23
         4 S-L25-AND-PRE/FA + Compound
```

=> d que 119 L11 SCR 1994 AND 1839 AND 2004 STR 🏓 L13 any unsaturated cyclo; this accounts for VAR G1=C/N NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM GGCAT IS UNS AT 10 DEFAULT ECLEVEL IS LIMITED GRAPH ATTRIBUTES: RSPEC 11 NUMBER OF NODES IS STEREO ATTRIBUTES: NONE L15 218 SEA FILE=REGISTRY SSS FUL L13 AND L11 STR Subset STA L16 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED GRAPH ATTRIBUTES: RSPEC 11 NUMBER OF NODES IS STEREO ATTRIBUTES: NONE 118 SEA FILE=REGISTRY SUB=L15 SSS FUL L16 L19 23 SEA FILE=HCAPLUS ABB=ON PLU=ON L18

#### => d ibib abs hitstr

ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:31047 HCAPLUS

DOCUMENT NUMBER:

136:85671

TITLE:

Preparation of diphenylurea derivatives and

their use as .alpha.2/5-HT2c antagonists

INVENTOR(S):

Lavielle, Gilbert; Muller, Olivier

; Millan, Mark; Dekeyne, Anne;

Brocco, Mauricette

CODEN: EPXXDW

PATENT ASSIGNEE(S):

Les Laboratoires Servier, Fr.

SOURCE:

Eur. Pat. Appl., 31 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

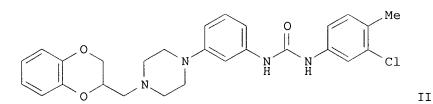
PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 1170288	A2 20020	109 EP 2001-401712	20010629
EP 1170288	A3 20020		20010029
		ES, FR, GB, GR, IT, LI, LU	, NL, SE, MC, PT,
IE, SI,	LT, LV, FI,	RO	
FR 2810979	A1 20020	104 FR 2000-8378	20000629
JP 2002037778	A2 20020	206 JP 2001-195947	20010628
US 2002025965	A1 20020	228 US 2001-896278	20010629
PRIORITY APPLN. INFO	.:	FR 2000-8378 A	20000629
OTHER SOURCE(S):	MARPAT :	36:85671	A 1/202 / F/
GI			A HPP

 $X^1 - G$  $R^2$ 

<u>Ĺ</u>2

 $R^{1}$ 



ΑB Title compds. I [R1-4 = H, halo, alkyl, alkoxy, hydroxy, alkylthio,mercapto, cyano, etc. or two of the substituents together with the atoms to which they are connected may form a (hetero)arom. cycle; L1-2 = H or together = CH2CH2; X1-2 and the carbons to which they are attached form a

```
(hetero)cycloalkyl group; X3 = H, halo, alkyl, alkoxy, OH, NO2, CN, NH2,
          etc.; G = (amino)alkyl-imidazol(in)yl, piperidin-4-yl or piperazinyl] were
          prepd. E.g. 3-[4-((2,3-Dihydro-1,4-benzodioxin-2-yl)methyl)-1-
          piperazinyl]aniline (prepn. given) was reacted with 3-chloro-4-
          methylphenylisocyanate (PhMe, reflux, 2 h) to give urea II isolated as the
          hydrochloride salt, m.p. 180-185.degree.C. II had pKi = 6.7 for the
          .alpha.2 receptor. I are useful for the treatment of sleep disorders,
          depression, sexual dysfunction, etc.
ΙT
          387864-92-8P, N-(3-Chloro-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-
          imidazol-2-yl)methyl)phenyl]urea hydrochloride 387864-96-2P,
          N-(3-Chloro-4-methylphenyl)-N'-[3-[1-(4,5-dihydro-1H-imidazol-2-methylphenyl)]
          yl)ethyl]phenyl]urea hydrochloride 387865-03-4P,
          N-(3-Chloro-4-methylphenyl)-N'-[3-[1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-yl)-1-(4,5-dihydro-1H-imidazol-2-
         methylethyl]phenyl]urea hydrochloride 387865-09-0P,
          N-(3-Chloro-4-methylphenyl)-N'-[4-methoxy-3-(4-methyl-1-
         piperazinyl)phenyl]urea hydrochloride 387865-23-8P,
         N-(3-Chloro-4-methylphenyl)-N'-[4-methyl-3-(4-methyl-1-
         piperazinyl)phenyl]urea hydrochloride 387865-28-3P,
          N-(3-Chloro-4-methylphenyl)-N'-[3-[4-((2,3-dihydro-1,4-benzodioxin-2-methylphenyl)]
          yl)methyl)-1-piperazinyl]phenyl]urea hydrochloride 387865-34-1P,
          N-(3-Chloro-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino)-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino-1H-imidazol-2-yl)amino-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino-1H-imidazol-2-yl)amino-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)amino-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-((4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-(4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-(4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-(4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-(4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-(4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-(4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-yl)-N'-[3-(4,5-dihydro-1H-imidazol-2-yl)-1H-imidazol-2-
         methylphenyl]urea hydrochloride 387865-39-6P,
          N-(3-Chloro-4-methylphenyl)-N'-[3-((4,5-dihydro-1H-imidazol-2-
          yl)amino)phenyl]urea hydrochloride 387865-45-4P,
         N-[4-Chloro-3-((4,5-dihydro-1H-imidazol-2-yl)amino)phenyl]-N'-(3-chloro-4-
         methylphenyl)urea hydrochloride 387865-51-2P,
          N-(3-Chloro-4-methylphenyl)-N'-[3-[4-((2,3-dihydro-1,4-benzodioxin-2-methylphenyl)]
          yl)methyl)-1-piperazinyl]-4-methoxyphenyl]urea hydrochloride
          387865-56-7P, 6-Chloro-5-fluoro-N-[4-methoxy-3-(4-methyl-1-
          piperazinyl)phenyl]-1-indolinecarboxamide 387865-60-3P,
         N-[3-[4-(2,3-Dihydro-1,4-benzodioxin-2-ylmethyl)-1-piperazinyl]phenyl]-1,2-
          dihydro-3H-benzo[e]indole-3-carboxamide dihydrochloride
          387865-63-6P 387865-66-9P, N-[3-[4-((2,3-Dihydro-1,4-
          benzodioxin-2-yl)methyl)-1-piperazinyl]-4-methoxyphenyl]-N'-(3,4-
          dimethylphenyl)urea dihydrochloride 387865-70-5P,
          N-(3-Chloro-4-fluorophenyl)-N'-[3-[4-((2,3-dihydro-1,4-benzodioxin-2-
          yl)methyl)-1-piperazinyl]-4-methoxyphenyl]urea hydrochloride
          387865-72-7P, N-[3-[4-((2,3-Dihydro-1,4-benzodioxin-2-yl)methyl)-1-
         piperazinyl]phenyl]-N'-(3,4-dimethylphenyl)urea hydrochloride
          387865-74-9P, N-(3-Chloro-4-fluorophenyl)-N'-[3-[4-((2,3-dihydro-
          1,4-benzodioxin-2-yl)methyl)-1-piperazinyl]phenyl]urea hydrochloride
          387865-76-1P 387865-80-7P, N-(3-Chloro-4-methylphenyl)-
         N'-[2-(1H-imidazol-4-yl)indan-5-yl]urea hydrochloride 387865-83-0P
          , N-[2-(1H-Imidazol-4-yl)indan-5-yl]-N'-(4-methylsulfanylphenyl)urea
         hydrochloride 387865-85-2P, N-(3,4-Dimethylphenyl)-N'-[2-(1H-
          imidazol-4-yl)indan-5-yl]urea hydrochloride 387865-87-4P,
         N-(3-Chloro-4-methylphenyl)-N'-[2-(4,5-dihydro-1H-imidazol-2-yl)-1,2,3,4-methylphenyl)
          tetrahydro-7-isoquinolinyl]urea hydrochloride 387865-91-0P,
         N-(3-Chloro-4-methylphenyl)-N'-[3-[2-(1H-imidazol-4-yl)ethyl]phenyl]urea
         hydrochloride 387865-94-3P, N-(3-Chloro-4-methylphenyl)-N'-[3-[2-
          (4,5-dihydro-1H-imidazol-2-yl)ethyl]phenyl]urea hydrochloride
          387865-96-5P, N-(3-Chloro-4-methylphenyl)-N'-[8-(1H-imidazol-4-yl)-
          5,6,7,8-tetrahydro-2-naphthalenyl]urea hydrochloride 387865-98-7P
          , N-(3-Chloro-4-methylphenyl)-N'-[7-(1H-imidazol-4-yl)-5,6,7,8-tetrahydro-
          2-naphthalenyl]urea hydrochloride 387866-00-4P,
          N-(3-Chloro-4-methylphenyl)-N'-[4-(1H-imidazol-4-yl)chroman-6-yl]urea
         hydrochloride 387866-02-6P, N-(3-Chloro-4-methylphenyl)-N'-[3-[4-
          ((2,3-dihydro-1,4-benzodioxin-2-yl)methyl)-1-piperazinyl]phenyl]urea
          387866-03-7P, N-[4-Chloro-3-((4,5-dihydro-1H-imidazol-2-
          yl)amino)phenyl]-N'-(3-chloro-4-methylphenyl)urea 387866-04-8P,
```

N-(3-Chloro-4-methylphenyl)-N'-[2-(1H-imidazol-4-yl)indan-5-yl]urea 387866-05-9P, N-[3-[4-((2,3-Dihydro-1,4-benzodioxin-2-yl)methyl)-1-piperazinyl]phenyl]-N'-(3,4-dimethylphenyl)urea RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; prepn. of diphenylurea derivs. and their use as .alpha.2/5-HT2c antagonists)

RN 387864-92-8 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[(4,5-dihydro-1H-imidazol-2-yl)methyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

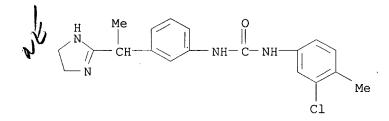


$$\begin{array}{c|c} H & O \\ N & CH_2 & NH-C-NH \\ \hline \\ Me & C1 \\ \end{array}$$

#### ● HCl

RN 387864-96-2 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[1-(4,5-dihydro-1H-imidazol-2-yl)ethyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



#### HC1

RN 387865-03-4 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[1-(4,5-dihydro-1H-imidazol-2-yl)-1-methylethyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### HCl

RN 387865-09-0 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### HCl

RN 387865-23-8 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[4-methyl-3-(4-methyl-1-piperazinyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 387865-28-3 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 387865-34-1 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[(4,5-dihydro-1H-imidazol-2-yl)amino]-4-methylphenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & Me \\ \hline N & NH & C-NH \\ \hline & & \\ & &$$

● HCl

RN 387865-39-6 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[(4,5-dihydro-1H-imidazol-2-yl)amino]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 387865-45-4 HCAPLUS

CN Urea, N-[4-chloro-3-[(4,5-dihydro-1H-imidazol-2-yl)amino]phenyl]-N'-(3-chloro-4-methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 387865-51-2 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]-4-methoxyphenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\$$

#### HCl

RN 387865-56-7 HCAPLUS

CN 1H-Indole-1-carboxamide, 6-chloro-5-fluoro-2,3-dihydro-N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 387865-60-3 HCAPLUS

CN 3H-Benz[e]indole-3-carboxamide, N-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]phenyl]-1,2-dihydro-, dihydrochloride (9CI) (CA INDEX NAME)

$$CH_2$$
 $NH-C-N$ 

#### ●2 HC1

RN 387865-63-6 HCAPLUS

CN 1H-Indole-1-carboxamide, 6-chloro-N-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]phenyl]-5-fluoro-2,3-dihydro-, dihydrochloride (9CI) (CA INDEX NAME)

#### •2 HCl

RN 387865-66-9 HCAPLUS

CN Urea, N-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]-4-methoxyphenyl]-N'-(3,4-dimethylphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)

#### ●2 HC1

RN 387865-70-5 HCAPLUS

CN Urea, N-(3-chloro-4-fluorophenyl)-N'-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]-4-methoxyphenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{O} \\ \text{CH}_2 \\ \text{N} \end{array}$$

HCl

RN 387865-72-7 HCAPLUS

CN Urea, N-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1piperazinyl]phenyl]-N'-(3,4-dimethylphenyl)-, monohydrochloride (9CI) (CA
INDEX NAME)

● HCl

RN 387865-74-9 HCAPLUS

CN Urea, N-(3-chloro-4-fluorophenyl)-N'-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 \\ \hline \\ O \\ \hline \\ O \\ \end{array}$$

● HCl

RN 387865-76-1 HCAPLUS

CN 1H-Indole-1-carboxamide, 6-chloro-N-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-

yl)methyl]-1-piperazinyl]phenyl]-2,3-dihydro-5-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

#### ●2 HCl

RN 387865-80-7 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[2,3-dihydro-2-(1H-imidazol-4-yl)-1H-inden-5-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 387865-83-0 HCAPLUS

CN Urea, N-[2,3-dihydro-2-(1H-imidazol-4-yl)-1H-inden-5-yl]-N'-[4-(methylthio)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### HCl

RN 387865-85-2 HCAPLUS

CN Urea, N-[2,3-dihydro-2-(1H-imidazol-4-yl)-1H-inden-5-yl]-N'-(3,4-dimethylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ \hline \\ NH-C-NH \\ \hline \\ N \end{array}$$

#### ● HCl

RN 387865-87-4 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[2-(4,5-dihydro-1H-imidazol-2-yl)-1,2,3,4-tetrahydro-7-isoquinolinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 387865-91-0 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[2-(1H-imidazol-4-yl)ethyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} H \\ N \\ \end{array} \\ CH_2-CH_2 \\ \end{array} \\ \begin{array}{c} O \\ NH-C-NH \\ \end{array} \\ \begin{array}{c} C1 \\ \end{array} \\ \begin{array}{c} Me \\ \end{array}$$

#### ● HCl

RN 387865-94-3 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[2-(4,5-dihydro-1H-imidazol-2-yl)ethyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} H \\ N \\ \end{array} \\ CH_2-CH_2 \\ \end{array} \\ \begin{array}{c} O \\ NH-C-NH \\ \end{array} \\ \begin{array}{c} Me \\ C1 \\ \end{array}$$

#### HCl

RN 387865-96-5 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[5,6,7,8-tetrahydro-8-(1H-imidazol-4-yl)-2-naphthalenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 387865-98-7 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[5,6,7,8-tetrahydro-7-(1H-imidazol-4-yl)-2-naphthalenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### HCl

RN 387866-00-4 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3,4-dihydro-4-(1H-imidazol-4-yl)-2H-1-benzopyran-6-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 387866-02-6 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 387866-03-7 HCAPLUS

CN Urea, N-[4-chloro-3-[(4,5-dihydro-1H-imidazol-2-yl)amino]phenyl]-N'-(3-chloro-4-methylphenyl)- (9CI) (CA INDEX NAME)

RN 387866-04-8 HCAPLUS

CN Urea, N-(3-chloro-4-methylphenyl)-N'-[2,3-dihydro-2-(1H-imidazol-4-yl)-1H-inden-5-yl]- (9CI) (CA INDEX NAME)

RN 387866-05-9 HCAPLUS

CN

CN Urea, N-[3-[4-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-1-piperazinyl]phenyl]-N'-(3,4-dimethylphenyl)- (9CI) (CA INDEX NAME)

IT 1632-84-4, 4-Methylthiophenyl isocyanate 2164-33-2, 2-Chloromethyl-2, 3-dihydro-1, 4-benzodioxine 5811-00-7, 1,2-Dihydrobenzo[e]indole 28479-22-3, 3-Chloro-4-methylphenyl isocyanate 50529-33-4, 3-Chloro-4-fluorophenylisocyanate 51163-27-0, 3,4-Dimethylphenyl isocyanate 148546-78-5, 4-Methoxy-3-(4-methyl-1-piperazinyl)phenylamine 148547-00-6, 4-Methyl-3-(4-methyl-1-piperazinyl)aniline 150586-86-0, (2-(1H-Imidazol-4-yl)indan-5-yl)amine 162100-44-9, 6-Chloro-5-methyl-2, 3-dihydroindole 183555-57-9 205584-67-4, 6-Chloro-5-fluoroindoline 387864-94-0, 3-((4,5-Dihydro-1H-imidazol-2-yl)methyl)aniline 387865-01-2, 3-[1-(4,5-Dihydro-1H-imidazol-2-yl)ethyl]aniline 387865-06-7, 3-[1-(4,5-Dihydro-1H-imidazol-2-yl)-1-methylethyl]aniline 387865-31-8, 3-[4-((2,3-Dihydro-1,4-benzodioxin-2-yl)methyl)-1piperazinyl]aniline 387865-42-1 387865-48-7, N-[3-[[(2-Aminoethyl)amino]carbothioyl]amino]-4-chlorophenyl]-N'-(3chloro-4-methylphenyl)urea 387865-54-5, 4-[5-[[(3-Chloro-4methylanilino)carbonyl]amino]-2-methoxyphenyl]-1-piperazinecarboxylic acid tert-butyl ester 387865-58-9 387865-68-1 387865-89-6, (2-(4,5-Dihydro-1H-imidazol-2-yl)-1,2,3,4tetrahydroisoquinolin-7-yl)amine 387865-93-2, 3-[2-(1H-Imidazol-4-yl)ethyl]phenylamine 387865-95-4, 3-[2-(4,5-Dihydro-1H-imidazol-2-yl)ethyl] phenylamine 387865-97-6(8-(1H-Imidazol-4-yl)-4a,5,6,7,8,8a-hexahydronaphthalen-2-yl)amine 387865-99-8, (7-(1H-Imidazol-4-yl)-5,6,7,8-tetrahydronaphthalen-2yl)amine 387866-01-5, (4-(1H-Imidazol-4-yl)chroman-6-yl)amine RL: RCT (Reactant); RACT (Reactant or reagent) (reactant; prepn. of diphenylurea derivs. and their use as .alpha.2/5-HT2c antagonists) RN 1632-84-4 HCAPLUS

Benzene, 1-isocyanato-4-(methylthio)- (9CI) (CA INDEX NAME)

RN 2164-33-2 HCAPLUS

CN 1,4-Benzodioxin, 2-(chloromethyl)-2,3-dihydro- (9CI) (CA INDEX NAME)

RN 5811-00-7 HCAPLUS

CN 1H-Benz[e]indole, 2,3-dihydro- (9CI) (CA INDEX NAME)

RN 28479-22-3 HCAPLUS

CN Benzene, 2-chloro-4-isocyanato-1-methyl- (9CI) (CA INDEX NAME)

RN 50529-33-4 HCAPLUS

CN Benzene, 2-chloro-1-fluoro-4-isocyanato- (9CI) (CA INDEX NAME)

RN 51163-27-0 HCAPLUS

CN Benzene, 4-isocyanato-1,2-dimethyl- (9CI) (CA INDEX NAME)

RN 148546-78-5 HCAPLUS

CN Benzenamine, 4-methoxy-3-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

RN

148547-00-6 HCAPLUS
Benzenamine, 4-methyl-3-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME) CN

RN 150586-86-0 HCAPLUS

1H-Inden-5-amine, 2,3-dihydro-2-(1H-imidazol-4-yl)- (9CI) (CA INDEX NAME) CN

RN 162100-44-9 HCAPLUS

CN 1H-Indole, 6-chloro-2,3-dihydro-5-methyl- (9CI) (CA INDEX NAME)

Me

RN 183555-57-9 HCAPLUS

1,3-Benzenediamine, N3-(4,5-dihydro-1H-imidazol-2-yl)-4-methyl- (9CI) (CA CN INDEX NAME)

RN 205584-67-4 HCAPLUS

CN 1H-Indole, 6-chloro-5-fluoro-2,3-dihydro- (9CI) (CA INDEX NAME)

RN 387864-94-0 HCAPLUS

CN Benzenamine, 3-[(4,5-dihydro-1H-imidazol-2-yl)methyl]- (9CI) (CA INDEX NAME)

$$CH_2$$
 $NH_2$ 

RN 387865-01-2 HCAPLUS

CN Benzenamine, 3-[1-(4,5-dihydro-1H-imidazol-2-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 387865-06-7 HCAPLUS

CN Benzenamine, 3-[1-(4,5-dihydro-1H-imidazol-2-yl)-1-methylethyl]- (9CI) (CA INDEX NAME)

RN 387865-31-8 HCAPLUS

CN Benzenamine, 3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 387865-42-1 HCAPLUS

CN 1,3-Benzenediamine, N-(4,5-dihydro-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)

RN 387865-48-7 HCAPLUS

CN Urea, N-[3-[[(2-aminoethyl)amino]thioxomethyl]amino]-4-chlorophenyl]- $\dot{N}$ '- (3-chloro-4-methylphenyl)- (9CI) (CA INDEX NAME)

RN 387865-54-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[5-[[[(3-chloro-4-methylphenyl)amino]carbonyl]amino]-2-methoxyphenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 387865-58-9 HCAPLUS

CN Benzoyl azide, 2-methoxy-5-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

RN 387865-68-1 HCAPLUS

CN Benzenamine, 3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1-piperazinyl]-4-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \hline \\ O \\ \hline \\ O \\ \end{array} \\ \begin{array}{c|c} CH_2 \\ \hline \\ NH_2 \\ \end{array}$$

RN 387865-89-6 HCAPLUS

CN 7-Isoquinolinamine, 2-(4,5-dihydro-1H-imidazol-2-yl)-1,2,3,4-tetrahydro-(9CI) (CA INDEX NAME)

$$H_2N$$
 $N$ 
 $N$ 

RN 387865-93-2 HCAPLUS

CN Benzenamine, 3-[2-(1H-imidazol-4-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 387865-95-4 HCAPLUS

CN Benzenamine, 3-[2-(4,5-dihydro-1H-imidazol-2-yl)ethyl]- (9CI) (CA INDEX NAME)

$$CH_2-CH_2$$
NH2

RN 387865-97-6 HCAPLUS

CN 2-Naphthalenamine, 4a,5,6,7,8,8a-hexahydro-8-(1H-imidazol-4-yl)- (9CI) (CA INDEX NAME)

RN 387865-99-8 HCAPLUS

CN 2-Naphthalenamine, 5,6,7,8-tetrahydro-7-(1H-imidazol-4-yl)- (9CI) (CA INDEX NAME)

RN 387866-01-5 HCAPLUS

CN 2H-1-Benzopyran-6-amine, 3,4-dihydro-4-(1H-imidazol-4-yl)- (9CI) (CA INDEX NAME)

#### => d all 1

#### L26 ANSWER 1 OF 4 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 6000388 Beilstein Molecular Formula (MF): C19 H21 C12 N3 O2

Synonym (SY): 1-methyl-4-hydroxy-4-<2-<N-(4-chlorophenyl)carbamoyl>amino-5-

chlorophenyl>piperidine

Autonom Name (AUN): 1-<4-chloro-2-(4-hydroxy-1-methyl-piperidin-4-yl)-

phenyl>-3-(4-chloro-phenyl)-urea

Beilstein Reference (SO): 6-22

CAS Reg. No. (RN): 121060-58-0 Beilstein Pref. RN (BPR): 121060-58-0 Formula Weight (FW): 394.30

Formula Weight (FW): 394.30 Lawson Number (LN): 27624; 14132; 2817; 1762

Ring System Data:

Number of Rings (CNR): 3
Ring Systems (CNRS): 3
Diff. Ring Systems (CNDRS): 2
Ring Heteros (CNRH): 1
Acyclic Heteros (CNAH): 6

Beilstein Ring I (BRIX)	. 1	(RF)	_	Formula	i	BRIX Count
6.1.0-1.1-0.0 6.1.0-0.0-3.1	1	C5N C6			- <del></del>	1 2

#### Preparation:

#### PRE

Start: BRN=386235 1-chloro-4-isocyanato-benzene, BRN=5949258 C12H17ClN2O

Yield: 91.30 %

Solv: ethyl acetate Ambient Temperature

Reference(s):

1. TAKAI, HARUKI; OBASE, HIROYUKI; TERANISHI, MASAYUKI, Chem.Pharm.Bull., 36 <1988> 12, 4671-4677, LA: EN, CODEN: CPBTAL

d cost COST IN U.S. DOLLARS	SINCE FILE	TOTAL
CONNECT CHARGES SEARCH CHARGES DISPLAY CHARGES	ENTRY 0.00 0.00 22.28	SESSION 39.39 180.95 118.50
CAPLUS FEE (5%)	22.28	338.84
FULL ESTIMATED COST	22.28	345.04
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY 0.00	TOTAL SESSION -14.25
IN FILE 'BEILSTEIN' AT 19:00:33 ON 07 MAR 2002		_

#### => d all 2

#### L26 ANSWER 2 OF 4 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 5993669 Beilstein Molecular Formula (MF): C19 H22 Cl N3 O2

Molecular Formula (MF): C19 H22 C1 N3 O2
Autonom Name (AUN): 1-<4-chloro-2-(4-hydroxy-1-methyl-piperidin-4-yl)-

phenyl>-3-phenyl-urea

Beilstein Reference (SO): 6-22

CAS Reg. No. (RN): 85732-65-6 Beilstein Pref. RN (BPR): 85732-65-6

Formula Weight (FW): 359.85

Lawson Number (LN): 27624; 14131; 2817; 1762

#### Ring System Data:

Number of Rings (CNR): 3
Ring Systems (CNRS): 3
Diff. Ring Systems (CNDRS): 2
Ring Heteros (CNRH): 1
Acyclic Heteros (CNAH): 5

Beilstein Ring (BRIX)	1	(RF)	-	i	BRIX Count
6.1.0-1.1-0.0 6.1.0-0.0-3.1		C5N C6		+-   	1 2

#### Preparation:

PRE

Start: BRN=471391 isocyanatobenzene, BRN=5949258 C12H17ClN2O

Yield: 90.30 %

Solv: ethyl acetate

#### Ambient Temperature

#### Reference(s):

1. TAKAI, HARUKI; OBASE, HIROYUKI; TERANISHI, MASAYUKI, Chem.Pharm.Bull., 36 <1988> 12, 4671-4677, LA: EN, CODEN: CPBTAL

# Melting Point: Value | Solv. | Ref. (MP) | (.SOL) | (Cel) | | 179.00 - 181.00 | ethyl acetate, | 1 | methanol | 179.00 - 181.00 | ethyl acetate, | 1 | methanol |

#### Reference(s):

1. TAKAI, HARUKI; OBASE, HIROYUKI; TERANISHI, MASAYUKI, Chem.Pharm.Bull., 36 <1988> 12, 4671-4677, LA: EN, CODEN: CPBTAL

#### => d all 3

#### L26 ANSWER 3 OF 4 COPYRIGHT 2002 BEILSTEIN CDS MDLI

857542 Beilstein Beilstein Reg. No. (BRN):

Molecular Formula (MF): C24 H26 N4 O

Chemical Name (CN): 1-phenyl-3-<4-(4-p-tolyl-piperazin-1-yl)-phenyl>-

urea

Autonom Name (AUN): 1-phenyl-3-<4-(4-p-tolyl-piperazin-1-yl)-phenyl>-

urea

Beilstein Reference (SO): 5-23-01-00391 CAS Reg. No. (RN): 74840-29-2 Beilstein Pref. RN (BPR): 74840-29-2

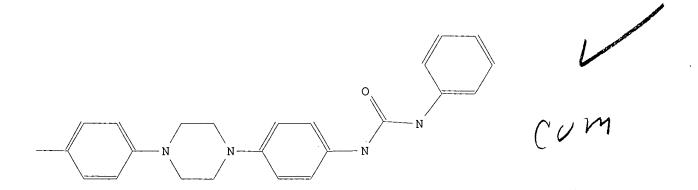
Formula Weight (FW): 386.50

Lawson Number (LN): 28000; 14508; 14141; 14131; 1762

Ring System Data:

Number of Rings (CNR): 4 Ring Systems (CNRS): 4 Diff. Ring Systems (CNDRS): 2 Ring Heteros (CNRH): 2 Acyclic Heteros (CNAH):

Beilstein Ring (BRIX)		(RF)	-		i	BRIX Count
6.1.0-2.2-0.0 6.1.0-0.0-3.1	i	C4N2 C6		·	+=   	1 3



#### Preparation:

PRE

Reference(s):

1. Husain et al., J.Indian Chem.Soc., 56 <1979>, 919, CODEN: JICSAH

Melting Point:

Value IRef. (MP)

1

(Cel)

299.00 |1

Reference(s):

1. Husain et al., J.Indian Chem.Soc., 56 <1979>, 919, CODEN: JICSAH

#### => d all 4

#### L26 ANSWER 4 OF 4 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 852562 Beilstein Molecular Formula (MF): C23 H24 N4 O

Chemical Name (CN): 1-phenyl-3-<4-(4-phenyl-piperazin-1-yl)-phenyl>-

urea

Autonom Name (AUN): 1-phenyl-3-<4-(4-phenyl-piperazin-1-yl)-phenyl>-

urea

Beilstein Reference (SO): 5-23-01-00389 CAS Reg. No. (RN): 74840-28-1 Beilstein Pref. RN (BPR): 74840-28-1

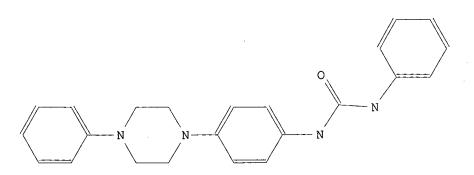
Formula Weight (FW): 372.47

Lawson Number (LN): 28000; 14508; 14131; 1762

#### Ring System Data:

Number of Rings (CNR): 4
Ring Systems (CNRS): 4
Diff. Ring Systems (CNDRS): 2
Ring Heteros (CNRH): 2
Acyclic Heteros (CNAH): 3

Beilstein Ring (BRIX)	(RF)	-		BRIX Count
6.1.0-2.2-0.0 6.1.0-0.0-3.1	+=====   C4N2   C6		+=   	1 3



### Preparation: PRE

#### Reference(s):

1. Husain et al., J.Indian Chem.Soc., 56 <1979>, 919, CODEN: JICSAH

#### 

301.00 |1

Reference(s):

1. Husain et al., J.Indian Chem.Soc., 56 <1979>, 919, CODEN: JICSAH

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HCAPLUS COPYRIGHT 2002 ACS L20 ANSWER 1 OF 22 ACCESSION NUMBER: 2001:581832 HCAPLUS

DOCUMENT NUMBER:

135:166842

TITLE:

Preparation of (1H-indol-5-yl) methanones,

2-(2-fluorophenyl)acetamides and 2-(pyrazol-1-

yl)pyrimidines as InhA inhibitors

INVENTOR(S):

Staveski, Mark M.; Sneddon, Scott F.; Yee,

Christopher; Janjigian, Andrew

PATENT ASSIGNEE(S):

Genzyme Corporation, USA

SOURCE:

PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_\_ \_\_\_\_ -----\_\_\_\_\_ 20010809 WO 2001056974 A2 WO 2001-US40045 20010206 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.:

US 2000-499183 A1 20000207

OTHER SOURCE(S):

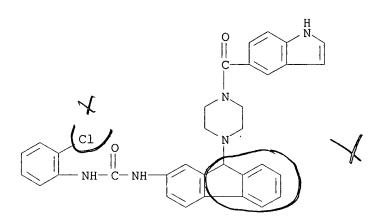
MARPAT 135:166842

GI

AΒ The title compds. [I-III, etc.; R1 = (un)substituted heteroaryl, piperazinyl, piperidinyl, etc.; R2 = OH, (un)substituted aryl, cycloalkyl, etc.; n = 1-2; R3 = (un) substituted Ph, heteroaryl; R4 = H, halo, alkyl, etc.] which inhibit the Mycobacterial enoyl-ACP reductase required for cell wall biosynthesis, and are useful for treating a bacterial infection in a patient, were prepd. Thus, reacting 2-fluorophenylacetic acid with 4-chlorophenethylamine in the presence of DMAP and EDCI in CH2C12 afforded II [R2 = 4-ClC6H4; n = 2] which showed 82% InhA inhibition at 40 .mu.M.

ΙT 353522-13-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic



L20 ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:795681 HCAPLUS

DOCUMENT NUMBER: 132:35606

TITLE: Preparation of multibinding piperidinylindole

derivatives as therapeutic agents that modulate 5-HT

receptors

INVENTOR(S): Marquess, Daniel; Griffin, John H.; Choi, Seok-Ki

PATENT ASSIGNEE(S): Advanced Medicine, Inc., USA

SOURCE: PCT Int. Appl., 190 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 23

PATENT INFORMATION:

PAT	CENT	NO.		KIND DATE APPLICATION NO. DATE													
WO	9964	044		А	1	1999	1216		W	0 19	99 <b>-</b> U	S127	51	1999	0607		
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		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,
		JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,
		TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,
		MD,	RU,	ТJ,	TM												
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,
		ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
							ML,										
ΑU	9945	435		Α	1	1999	1230		A	U 19	99-4	5435		1999	0604		
EΡ	1003	540		Α	1	2000	0531		E	P 19	99-9	2834	4	1999	0604		
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		ΙE,	FΙ														
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ΑU	9944	253		Α	1	1999	1230		Α	U 19	99-4	4253		1999	0607		
ΑU	9944	265		A	1	1999	1230		A	U 19	99-4	4265		1999	0607		

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                                                     19990607
AU 9946751
                 A1
                      19991230
                                    AU 1999-46751
                                                     19990607
AU 9946752
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                      19991230
                                    AU 1999-46752
                                                     19990607
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20000719 EP 1999-930123 19990607
AU 9946754
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EP 1019360
                 Α1
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
                 A1 20010307
EP 1080080
                                  EP 1999-930158 19990607
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
EP 1083917
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                                    EP 1999-927291
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT.
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EP 1083918
                A1 20010321
                                   EP 1999-927317 19990607
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
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EP 1083893
                                    EP 1999-927331
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                A1 20010321
                                  EP 1999-928425 19990607
EP 1083888
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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EP 1085887
                A2 20010328
                                    EP 1999-928349
                                                   19990607
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
                A2 20010328 EP 1999-930157 19990607
EP 1085870
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
                                    EP 1999-930156 19990607
EP 1094826
                A1 20010502
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
                A1 20010523
                                  EP 1999-930155 19990607
EP 1100519
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
EP 1107753
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                                    EP 1999-928457
                                                   19990607
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
AU 9943368
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AU 9943376
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AU 9946747
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AU 9946776
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EP 1082289
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   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
EP 1083921
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                                  EP 1999-955430
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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EP 1085889
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                                    EP 1999-928451
                                                    19990608
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
EP 1085847
                 A2 20010328 EP 1999-928520 19990608
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
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EP 1085868
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                                    EP 1999-930150
                                                    19990608
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, FI
EP 1085894
                A1
                      20010328
                                   EP 1999-937155 19990608
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI EP 1102597 20010530 EP 1999-955431 19990608 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI US 6288055 В1 20010911 US 2000-499476 20000207 PRIORITY APPLN. INFO.: US 1998-88466 Р 19980608 US 1998-92938 Ρ 19980715 US 1998-96606 Ρ 19980814 WO 1999-US11786 W 19990604 US 1999-327044 B1 19990607 WO 1999-US11803 W 19990607 WO 1999-US11805 W 19990607 WO 1999-US12669 W 19990607 WO 1999-US12673 W 19990607 WO 1999-US12727 W 19990607 WO 1999-US12728 W 19990607 WO 1999-US12730 W 19990607 WO 1999-US12731 W 19990607 WO 1999-US12751 W 19990607 WO 1999-US12778 W 19990607 WO 1999-US12782 W 19990607 WO 1999-US12626 W 19990608 WO 1999-US12770 W 19990608 WO 1999-US12876 W 19990608 WO 1999-US12907 W 19990608 WO 1999-US12989 W 19990608 WO 1999-US12994 W 19990608 WO 1999-US12995 19990608 W OTHER SOURCE(S): MARPAT 132:35606

GI

$$N-CH_2-CH_2-N$$
 $N+CO-NH$ 
 $N+CO-NH$ 

AB Novel multibinding piperidinylindole compds, LpXq [where L = a ligand capable of binding to a 5-HT receptor; X = a linker; p = 2-10; q = 1-2], that modulate 5-HT receptors are disclosed. Preferred ligands are of formula I [where R3 and R5 = independently point of attachment of the linker, H, alkyl, heterocyclic, heteroaryl(alkyl), amidoalkyl,

(di)alkylaminosulfonylalkyl, arylsulfonylalkyl, heterocyclosulfonylalkyl, arylcarbonylamino, alkylsulfonamido, or alkylsufonylalkyl]. Over 140 multibinding compds., formed from two piperidinylindole derivs. and a difunctional linker, were prepd. For example, condensation of 5-(4-fluorobenzoyl)amino-3-(piperidin-4-yl)-1H-indole with 1,2-dibromoethane at 72.degree. in DMF, after workup and chromatog., yielded the dimer II. Compds. of this invention are useful in the treatment of migraine, headache, itch, motion sickness, depression, emesis, memory loss, anxiolytic disorders, obesity, gastrointestinal disorders, and irritable bowel syndrome (no data). The multibinding compds. provide greater biol. and/or therapeutic effects than the aggregate of the unlinked ligands due to their multibinding properties (no data). Combinatorial arrays, methods of synthesis, and methods of assaying the dimeric and multimeric compds. are also embodied by the invention.

## IT 252354-77-1P 252354-80-6P 252354-82-8P 252354-83-9P 252354-84-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compd.; prepn. of multibinding piperidinylindole derivs. as therapeutic agents that modulate 5-HT receptors and are useful for the treatment of migraine)

RN 252354-77-1 HCAPLUS

CN Urea, N,N''-(2,2'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis[N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 252354-80-6 HCAPLUS

CN Urea, N,N''-[methylenebis(2,6-diethyl-4,1-phenylene)]bis[N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

Me NH C NH 
$$\rightarrow$$
 CH2  $\rightarrow$  Et O NH  $\rightarrow$  CH2  $\rightarrow$  NH  $\rightarrow$  C NH  $\rightarrow$  Et  $\rightarrow$  Et  $\rightarrow$  Et  $\rightarrow$  Et  $\rightarrow$  CH2  $\rightarrow$  NH  $\rightarrow$  C  $\rightarrow$  NH  $\rightarrow$  C  $\rightarrow$  NH  $\rightarrow$  C  $\rightarrow$  NH  $\rightarrow$  Et  $\rightarrow$  Et  $\rightarrow$  Et  $\rightarrow$  O  $\rightarrow$  NH  $\rightarrow$  C  $\rightarrow$  NH  $\rightarrow$  NH  $\rightarrow$  C  $\rightarrow$  NH  $\rightarrow$  NH  $\rightarrow$  C  $\rightarrow$  NH  $\rightarrow$  N

PAGE 1-B

RN 252354-82-8 HCAPLUS

CN Urea, N,N''-(methylenedi-4,1-phenylene)bis[N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$\begin{array}{c|c} H & \text{Me} \\ \hline \end{array}$$

RN 252354-83-9 HCAPLUS

CN Urea, N,N''-(oxydi-4,1-phenylene)bis[N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 252354-84-0 HCAPLUS

CN Urea, N,N''-(2-methyl-1,3-phenylene)bis[N'-[3-(1-methyl-4-piperidinyl)-1Hindol-5-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

Me
N

Me

NH-C-NH-C-NH-C-NH

PAGE 1-B

Me

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:404951 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

131:58850

TITLE:

Preparation of quinolinepiperazine and

quinolinepiperidine derivatives and their use as combined 5-HT1A, 5-HT1B, and 5-HT1D receptor

antagonists

INVENTOR (S):

Gaster, Laramie Mary

PATENT ASSIGNEE(S):

Smithkline Beecham Plc, UK

SOURCE:

PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

• 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 9931086 A1 19990624 WO 1998-EP7804 19981202

W: CA, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE

EP 1047691 A1 20001102 EP 1998-965729 19981202

R: BE, CH, DE, ES, FR, GB, IT, LI, NL

PRIORITY APPLN. INFO.: GB 1997-26364 A 19971212

GB 1997-26905 A 19971219 GB 1998-317 A 19980107 WO 1998-EP7804 W 19981202

OTHER SOURCE(S):

GI

RN

MARPAT 131:58850

AB The title compds. I [Ra = substituted Ph, bicyclic aryl, heterocyclyl, etc.; L = YC(0)DG, C(0)DG, DGC(0) in which Y is -NH-, NR5 where R5 is C1-6alkyl, or Y is -CH2- or -O-; D is nitrogen, carbon or a CH group, or G is hydrogen or C1-6alkyl providing that D is nitrogen or a CH group, or G together with Rb1 forms a group W where W is (CR16R17)t where t is 2, 3 or 4 and R16 and R17 are independently hydrogen or C1-6alkyl or W is (CR16R17)u-J where u is 0, 1, 2 or 3 and J is oxygen, sulfur, CR16:CR17, CR16:N, :CR160, :CR16S or :CR16NR17 provided that u is not 0 when J is oxygen or sulfur; X is nitrogen or carbon; Rb1, Rb2 and Rb3 are independently hydrogen, halogen, hydroxy, C1-6alkyl, C2-6alkenyl, C3-6cycloalkyl, trifluoromethyl, C1-6alkoxy or aryl, or Rb1 together with G forms a group W as defined above; Rc is hydrogen or C1-6alkyl] were prepd. E.g., N-[4-(4-methylpiperazin-1-yl)quinolin-6-yl]-N'-[5-(pyridin-4-yl)naphth-1-yl]urea was prepd. Some examples of I had pKi values > 8.5 at 5-HT1A, 5-HT1B, and 5-HT1D receptors.

227955-65-9P 227955-93-3P 227955-96-6P 227956-03-8P 227956-04-9P 227956-05-0P 227956-24-3P 227956-25-4P 227956-26-5P 227956-30-1P 227956-31-2P 227956-32-3P 227956-33-4P 227956-34-5P 227956-36-7P 227956-37-8P 227956-38-9P 227956-40-3P 227956-41-4P 227956-42-5P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of quinolinepiperazine and quinolinepiperidine derivs. and their use as combined 5-HT1A, 5-HT1B, and 5-HT1D receptor antagonists) 227955-65-9 HCAPLUS

CN Urea, N-[3-chloro-4-(4-pyridinyl)phenyl]-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]- (9CI) (CA INDEX NAME)

RN 227955-93-3 HCAPLUS

CN Urea, N-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]-N'-[4-(4-pyridinyl)-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 227955-96-6 HCAPLUS

CN Urea, N-[3-cyano-4-(4-pyridinyl)phenyl]-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]- (9CI) (CA INDEX NAME)

RN 227956-03-8 HCAPLUS

CN Urea, N-[3-chloro-4-(4-pyridinyl)phenyl]-N'-[4-(1-methyl-4-piperidinyl)-6-quinolinyl]- (9CI) (CA INDEX NAME)

RN 227956-04-9 HCAPLUS

CN Urea, N-[3-methyl-4-(6-methyl-2-pyridinyl)phenyl]-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]- (9CI) (CA INDEX NAME)

RN 227956-05-0 HCAPLUS

CN Urea, N-[4-(2,6-dimethyl-4-pyridinyl)-3-methylphenyl]-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]- (9CI) (CA INDEX NAME)

RN 227956-24-3 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]-

## (9CI) (CA INDEX NAME)

RN 227956-25-4 HCAPLUS
CN Urea, N-(2,3-dichlorophenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl](9CI) (CA INDEX NAME)

RN 227956-26-5 HCAPLUS
CN Urea, N-[1,1'-biphenyl]-4-yl-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl](9CI) (CA INDEX NAME)

RN 227956-27-6 HCAPLUS
CN Urea, N-(3,4-dichlorophenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl](9CI) (CA INDEX NAME) .

RN 227956-28-7 HCAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]- (9CI) (CA INDEX NAME)

RN 227956-29-8 HCAPLUS

CN Urea, N-(3-cyanophenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]-(9CI) (CA INDEX NAME)

RN 227956-30-1 HCAPLUS

CN Urea, N-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]-N'-(4-phenoxyphenyl)-(9CI) (CA INDEX NAME)

RN 227956-32-3 HCAPLUS
CN Urea, N-(4-acetylphenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl](9CI) (CA INDEX NAME)

RN 227956-33-4 HCAPLUS
CN Urea, N-(2-bromophenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl](9CI) (CA INDEX NAME)

RN 227956-34-5 HCAPLUS

CN Urea, N-[3,5-bis(trifluoromethyl)phenyl]-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]- (9CI) (CA INDEX NAME)

RN 227956-36-7 HCAPLUS

CN Urea, N-(3-acetylphenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]-(9CI) (CA INDEX NAME)

RN 227956-37-8 HCAPLUS

CN Urea, N-(2,6-difluorophenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]-(9CI) (CA INDEX NAME)

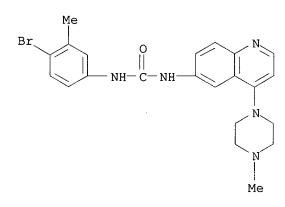
RN 227956-38-9 HCAPLUS
CN Urea, N-(3-bromophenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl](9CI) (CA INDEX NAME)

RN 227956-40-3 HCAPLUS
CN Urea, N-(2,6-dichlorophenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl](9CI) (CA INDEX NAME)

RN 227956-41-4 HCAPLUS
CN Urea, N-(4-chloro-2-methylphenyl)-N'-[4-(4-methyl-1-piperazinyl)-6-quinolinyl]- (9CI) (CA INDEX NAME)

RN 227956-42-5 HCAPLUS

CN Urea, N-(4-bromo-3-methylphenyl)-N'-[4-(4-methyl-1-piperazinyl)-6quinolinyl] - (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 22 HCAPLUS COPYRIGHT 2002 ACS 1999:126896 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

130:182356

TITLE:

Preparation of bicyclic compounds as ligands for 5-HT1

receptors

INVENTOR(S):

Gaster, Laramie Mary; Wyman, Paul Adrian; Flynn, Sean

Thomas

PATENT ASSIGNEE(S):

SmithKline Beecham PLC, UK

SOURCE:

PCT Int. Appl., 32 pp. CODEN: PIXXD2

1

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	NO. KIND DATE		APPLICATION NO.	DATE		
WO 9907700	A1	19990218	WO 1998-EP5116	19980806		

W: CA, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE

EP 1003738 Α1 20000531 EP 1998-946322 19980806 R: BE, CH, DE, ES, FR, GB, IT, LI, NL

JP 2001512727 T2 20010828 JP 2000-506204 19980806 PRIORITY APPLN. INFO.: GB 1997-16804 A 19970809

GB 1998-1633 A 19980126

WO 1998-EP5116 W 19980806

OTHER SOURCE(S): MARPAT 130:182356

G1

#### \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The title compds. [I; R11 = II (wherein P1 = Ph, bicyclic aryl, 5-7 membered heterocyclyl contg. 1-3 heteroatoms selected from O, N and S, etc.; R1 = H, halo, C1-6 alkyl, etc.; R2 = H, halo, C1-6 alkyl, etc.; a = 1-3), III (P2, P3 = P1; A = a bond, O, SOm (m = 0-2), etc.; R3 = R2; a, b = 1-3); L = YC(:V)DG (Y = NH, N(C1-6 alkyl), CH2, O; V = O, S; D = N, C, CH; G = H, C1-6 alkyl); Q = (un)substituted 5-7 membered carbocyclic or heterocyclic ring contg. 1-3 heteroatoms selected from O, N or S; R13 = 5-7 membered carbocyclic or heterocyclic ring contg. 1-3 heteroatoms selected from O, N or S; R12 = H, halo, OH, etc.], useful in the treatment of CNS disorders, e.g., anxiety and depression, were prepd. Thus, treatment of 4-(pyridin-4-yl)naphth-1-ylamine with triphosgene in CH2C12 in the presence of Et3N followed by the addn. of 5-amino-3-(1-methylpiperidin-4-yl)-1H-indole afforded the urea IV which showed pKi of > 8.0 at 5-HT1A, 5-HT1B and 5-HT1D receptors.

IT 220683-76-1P 220683-77-2P 220683-78-3P

220683-82-9P 220683-85-2P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of bicyclic compds. as ligands for 5-HT1 receptors)

RN 220683-76-1 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[3-methyl-4-(4-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 220683-77-2 HCAPLUS

CN Urea, N-[2,3-dichloro-4-(4-pyridinyl)phenyl]-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 220683-78-3 HCAPLUS

CN Urea, N-[2-chloro-4-(4-pyridinyl)phenyl]-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 220683-82-9 HCAPLUS

CN Urea, N-[3-chloro-4-(4-pyridinyl)phenyl]-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 220683-85-2 HCAPLUS

CN Urea, N-[3-chloro-4-(4-pyridinyl)phenyl]-N'-[3-(1-methyl-4-piperidinyl)benzo[b]thien-5-yl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:742520 HCAPLUS

DOCUMENT NUMBER:

130:13996

TITLE:

Preparation of N-phenylalkyl-N'-

(piperazinylalkoxy)phenylureas as hypolipemic agents

and antiarteriosclerotics

INVENTOR(S):

Inoue, Shinya; Tarao, Yoshihiro; Komatsu, Yoshiyuki;

Suzuki, Kazuo; Takahashi, Chizuko

PATENT ASSIGNEE(S):

Mitsubishi Chemical Industries Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 101 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10306078	A2	19981117	JP 1997-117976	19970508

OTHER SOURCE(S):

MARPAT 130:13996

GI

$$\begin{array}{c|c}
R^{1} & R^{5} & R^{6} \\
R^{2} & R^{7} & R^{7} \\
R^{2} & R^{3} & R^{7} & R^{7} \\
R^{2} & R^{3} & R^{7} & R^{7} \\
& (CH_{2}) 1 - N & N - Y
\end{array}$$

Title compds. I [R1-R3 = H, OH, C1-3 alkyl, C1-3 alkoxy, etc.; R4 = H, C1-7 alkyl, C3-7 cycloalkyl, Ar(CH2)p; Ar = C6-10 aryl; p = 1-3; R5-R7 = H, C1-3 alkoxy, C1-3 alkyl, NR8R9, etc.; R8, R9 = C1-3 alkyl; Y = C1-3 alkyl, 1-4 N-contg. 5- to 6-membered heterocycles, (substituted) C6-10 aryl; k = 0-3; l = 2-4], their salts, their hydrates, or their solvates are prepd. 2-[3-(4-Phenyl-1-piperazinyl)propoxy]-6-methylaniline (0.47 g) was treated with 0.31 g 4-(2-pyridylmethyloxy)phenylmethylamine in CH2C12 in the presence of (C13C)2CO3 and Et3N at room temp. for l h to give 0.66

g N-[4-(2-pyridylmethyloxy)phenyl]methyl-N'-[2-[3-(4-phenyl-1-piperazinyl)propoxy]-6-methylphenyl]urea, which in vitro showed IC50 of 0.08 .mu.M against ACAT in Hep G2 cell from human liver cancer.

216145-08-3P 216145-11-8P 216145-21-0P 216145-22-1P 216145-24-3P 216145-25-4P 216145-27-6P 216145-28-7P 216145-29-8P 216145-30-1P 216145-33-4P 216145-34-5P 216145-40-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of phenylalkyl[(piperazinylalkoxy)phenyl]ureas as hypolipemic
agents and antiarteriosclerotics)

RN 216145-08-3 HCAPLUS

CN

Urea, N-[4-(4-butyl-1-piperazinyl)phenyl]-N'-[2-methyl-6-[3-(4-phenyl-1-piperazinyl)propoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 216145-11-8 HCAPLUS

CN Urea, N-[4-(4-butyl-1-piperazinyl)phenyl]-N'-[2-methyl-6-[3-(4-phenyl-1-piperazinyl)propoxy]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

### ●2 HCl

RN 216145-21-0 HCAPLUS

CN Urea, N-[2-methyl-6-[3-(4-phenyl-1-piperazinyl)propoxy]phenyl]-N'-[4-(4-propyl-1-piperazinyl)phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

RN 216145-22-1 HCAPLUS

CN Urea, N-[4-[4-(1-methylethyl)-1-piperazinyl]phenyl]-N'-[2-methyl-6-[3-(4-phenyl-1-piperazinyl)propoxy]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 216145-24-3 HCAPLUS

CN Urea, N-[2-(4-butyl-1-piperazinyl)phenyl]-N'-[2-methyl-6-[3-(4-phenyl-1-piperazinyl)propoxy]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 216145-25-4 HCAPLUS

CN Urea, N-[2-methyl-6-[3-(4-phenyl-1-piperazinyl)propoxy]phenyl]-N'-[4-(4-pentyl-1-piperazinyl)phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Me- 
$$(CH_2)$$
 4 NH-C-NH
NH-C-NH
N-  $(CH_2)$  3-0

•2 HCl

RN 216145-27-6 HCAPLUS

CN Urea, N-[4-(4-butyl-1-piperazinyl)phenyl]-N'-[2-[3-[4-(2-methoxyphenyl)-1-piperazinyl]propoxy]-6-methylphenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

# ●2 HCl

RN 216145-28-7 HCAPLUS

CN Urea, N-[2-[3-[4-(2-methoxyphenyl)-1-piperazinyl]propoxy]-6-methylphenyl]N'-[4-[4-(2-pyridinyl)-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA
INDEX NAME)

### ●2 HC1

RN 216145-29-8 HCAPLUS

CN Urea, N-[4-(4-butyl-1-piperazinyl)phenyl]-N'-[2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propoxy]-6-methylphenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

### •2 HCl

RN 216145-30-1 HCAPLUS

CN Urea, N-[4-(4-butyl-1-piperazinyl)phenyl]-N'-[2-[3-[4-(2-fluorophenyl)-1-piperazinyl]propoxy]-6-methylphenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

# ●2 HC1

RN 216145-33-4 HCAPLUS

CN Urea, N-[2-methyl-6-[3-(4-phenyl-1-piperazinyl)propoxy]phenyl]-N'-[4-[4-(2-pyridinyl)-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 216145-34-5 HCAPLUS

CN Urea, N-[2-methyl-6-[3-(4-phenyl-1-piperazinyl)propoxy]phenyl]-N'-[4-[4-(2-pyridinyl)-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

# ●2 HC1

RN 216145-40-3 HCAPLUS

CN Urea, N-[2-methyl-6-[3-(4-phenyl-1-piperazinyl)propoxy]phenyl]-N'-[4-[4-(2-pyridinylmethyl)-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

L20 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:709065 HCAPLUS

DOCUMENT NUMBER: 129:330740

TITLE: Preparation of bicyclic aryl or bicyclic heterocyclic

ring containing (4-methylpiperazin-1-yl)phenyl

compounds having a combined 5HT1A, 5HT1B and 5HT1D

receptor antagonistic activity

INVENTOR(S): Gaster, Laramie Mary; Wyman, Paul Adrian

PATENT ASSIGNEE(S): Smithkline Beecham PLC, UK

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT NO.	KIND	DATE	APPLICATION NO. DATE
WO	9847885	A1	19981029	WO 1998-EP2265 19980414
	•	JP, US	טב טע	EC ET ED OD OD TE'TH IN MC NI
	RW: AT, E		, DE, DK,	ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
EP	975614	A1	20000202	EP 1998-919278 19980414
	•			IT, LI, NL
JP	2001526643	3 T2	20011218	JP 1998-544988 19980414
US	6159979	Α	20001212	US 1999-403149 19991015
PRIORIT	Y APPLN. IN	1FO.:		GB 1997-7876 A 19970418
				GB 1998-1635 A 19980126
				WO 1998-EP2265 W 19980414
PRIORIT			20001212	GB 1997-7876 A 19970418 GB 1998-1635 A 19980126

OTHER SOURCE(S): MARPAT 129:330740

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; R1 = II, III (P1 = bicyclic aryl, bicyclic heterocyclic ring contg. 1-3 heteroatoms selected from O, N and S; P2, P3

= Ph, bicyclic aryl, 5-7 membered heterocyclic ring contg. 1-3 heteroatoms selected from O, N and S, or bicyclic heterocyclic group contg. 1-3 heteroatoms selected from O, N or S, providing that at least one of P2 and P3 = bicyclic aryl or bicyclic heterocyclic group; R11 = H, halo, C1-6 alkyl, etc.; R12, R13 = H, halo, C1-6 alkyl, etc.; a, b = 1-3; A = a bond, O, CH2, etc.); L = C(V)DG, DGC(V), YC(V)DG1; V = O, S; D = N, C, CH; G and G1 = H, C1-6 alkyl; Y = NH, NR5 (wherein R5 = C1-6 alkyl), CH2, O; X = N, C; R2, R3 = H, halo, OH, etc.; R4 = H, C1-6 alkyl], useful as CNS agents, were prepd. Thus, treatment of 4-(pyridin-4-yl)naphth-1-ylamine with triphosgene in the presence of Et3N in CH2C12 followed by the addn. of a soln. of 4-chloro-3-(4-methylpiperazin-1-yl)aniline in CH2C12 afforded 27% IV which showed pKi of > 8.0 at 5-HT1A, 5-HT1B and 5HT1D receptors.

IT 215162-52-0P 215162-64-4P

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of bicyclic aryl or bicyclic heterocyclic ring contg. (4-methylpiperazin-1-yl)phenyl compds. having a combined 5HT1A, 5HT1B and 5HT1D receptor antagonistic activity)

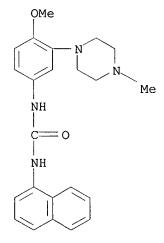
RN 215162-52-0 HCAPLUS

CN Urea, N-(4-bromo-1-naphthalenyl)-N'-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 215162-64-4 HCAPLUS

CN Urea, N-(5-bromo-1-naphthalenyl)-N'-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

ΙT 215162-51-9P 215162-53-1P 215162-56-4P 215162-58-6P 215162-59-7P 215162-60-0P 215162-62-2P 215162-63-3P 215162-66-6P 215162-67-7P 215162-68-8P 215162-70-2P 215162-71-3P 215162-72-4P 215162-74-6P 215162-78-0P 215162-85-9P 215162-89-3P 215162-90-6P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of bicyclic aryl or bicyclic heterocyclic ring contg. (4-methylpiperazin-1-yl)phenyl compds. having a combined 5HT1A, 5HT1B and 5HT1D receptor antagonistic activity) 215162-51-9 HCAPLUS RN CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-1-naphthalenyl-(9CI) (CA INDEX NAME)



RN 215162-53-1 HCAPLUS
CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-[4-(4-pyridinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)

RN 215162-56-4 HCAPLUS

CN Urea, N-[4-chloro-3-(4-methyl-1-piperazinyl)phenyl]-N'-[4-(4-pyridinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)

RN 215162-58-6 HCAPLUS

CN Urea, N-[4-methoxy-3-(1-methyl-4-piperidinyl)phenyl]-N'-[4-(4-pyridinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)

RN 215162-59-7 HCAPLUS

CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-(5,6,7,8-tetrahydro-1-naphthalenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 215162-60-0 HCAPLUS

CN Urea, N-(2,3-dihydro-1H-inden-5-yl)-N'-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

RN 215162-63-3 HCAPLUS
CN Urea, N-1,3-benzodioxol-5-yl-N'-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 215162-66-6 HCAPLUS
CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-(2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)

RN 215162-67-7 HCAPLUS

RN 215162-68-8 HCAPLUS

RN 215162-70-2 HCAPLUS

CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-6-quinolinyl-(9CI) (CA INDEX NAME)

RN 215162-71-3 HCAPLUS

CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-5-quinolinyl-(9CI) (CA INDEX NAME)

RN 215162-72-4 HCAPLUS

CN Urea, N-(2,3-dihydro-5-benzofuranyl)-N'-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

4

RN 215162-74-6 HCAPLUS

CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-[5-(3-pyridinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)

RN 215162-78-0 HCAPLUS

CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-(5-phenyl-1-naphthalenyl)- (9CI) (CA INDEX NAME)

RN 215162-85-9 HCAPLUS

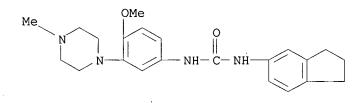
CN Urea, N-[5-(3-acetylphenyl)-1-naphthalenyl]-N'-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 215162-89-3 HCAPLUS

CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-(5,6,7,8-tetrahydro-1-naphthalenyl)- (9CI) (CA INDEX NAME)

215162-90-6 HCAPLUS RN

CN Urea, N-(2,3-dihydro-1H-inden-5-yl)-N'-[4-methoxy-3-(4-methyl-1-yl)]piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



L20 ANSWER 7 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1998:542759 HCAPLUS

DOCUMENT NUMBER:

129:175548

TITLE:

Preparation of benzofurans and benzothienes as

serotonin 5-HTlf agonists

INVENTOR(S):

Fritz, James E.; Kaldor, Stephen W.; Liang, Sidney Xi;

Singh, Upinder; Xu, Yao-chang

PATENT ASSIGNEE(S):

Eli Lilly and Co., USA

SOURCE:

U.S., 30 pp.

DOCUMENT TYPE:

CODEN: USXXAM

Patent

LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

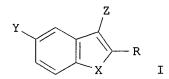
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 1997-938739 US 5792763 19980811 Α 19970926

OTHER SOURCE(S):

MARPAT 129:175548

GΙ



AB The title compds. [I; X = O, S; Y = R4C(O)NH, R5R6NC(Q)NH, R7OC(O)NH, R8SO2NH; Z = N-(un) substituted piperidin-4-yl, (un) substituted 2-aminoethyl; R, R1 = H, C1-4 alkyl; R2 = C1-4 alkyl, C3-8 cycloalkyl, etc.; R3 =  $^{\circ}$ H, C1-4 alkyl; R4 = C1-4 alkyl, C3-7 cycloalkyl, (un) substituted Ph, etc.; R5, R6 = H, C1-6 alkyl, C3-6 alkenyl, etc.; R5R6N = pyrrolidine, piperidine, piperazine, etc.; R7 = C1-6 alkyl, C3-6 alkenyl, (un)substituted Ph, etc.; R8 = C1-4 alkyl, (un)substituted Ph, di(C1-4 alkyl) amino; Q = S, O], useful for the prevention and treatment ofmigraine and assocd. disorders, were prepd. and formulated. Thus, reaction of 5-amino-3-(N', N'-dimethyl-2-aminoethyl) benzothiophene with 4-fluorobenzoyl chloride in the presence of pyridine in CH2Cl2 afforded 44% I oxalate [R = H; Z = CH2CH2NMe2; 4-FC6H4CONH]. Representative compds. I were found to have an affinity at the 5-HT1F receptor of Ki < 1.5 .mu.M.

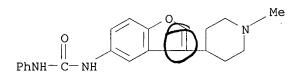
ΙT 206062-76-2P

> RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzofurans and benzothienes as serotonin 5-HT1f agonists)

RN206062-76-2 HCAPLUS

Urea, N-[3-(1-methyl-4-piperidinyl)-5-benzofuranyl]-N'-phenyl-, CN monohydrochloride (9CI) (CA INDEX NAME)



HC1

L20 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:239216 HCAPLUS

DOCUMENT NUMBER: 128:294693

TITLE: Preparation of benzothienyl- and benzofurylamides as

serotonin 5-HT1F agonists for treatment of migraine.

Fritz, James E.; Kaldor, Stephen W.; Liang, Stephen INVENTOR(S):

X.; Singh, Upinder; Xu, Yao-Chang

PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Fritz, James E.; Kaldor,

Stephen W.; Liang, Stephen X.; Singh, Upinder; Xu,

Yao-Chang

PCT Int. Appl., 97 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

### PATENT INFORMATION:

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PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
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                    Al 19980416 WO 1997-US17293 19970926
    WO 9815545
        W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH,
            HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL,
            TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ,
            MD, RU, TJ, TM ·
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    AU 9746526
                    A1
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                          20010213
                                        JP 1998-517564
                                                         19970926
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                          19980415
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                          19980506
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        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                      US 1996-27424
                                                      P 19961008
                                      WO 1997-US17293 W 19970926
OTHER SOURCE(S):
                      MARPAT 128:294693
GΙ
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AΒ Title compds. [I; Q, X = O, S; Y = R4CONH, R5R6NCQNH, R7OCONH, R8SO2NH; Z = CH2CH2NR2R3, (N-alkyl)-4-piperidinyl; R = H, alkyl; R2 = alkyl, cycloalkyl, cycloalkylalkyl, aralkyl, heteroarylalkyl; R3 = H, alkyl; R4 = alkyl, alkoxyalkyl, cycloalkyl, (substituted) Ph, biphenylyl, naphthyl, heterocyclyl; R5, R6 = H, alkyl, alkenyl, cycloalkyl, (substituted) Ph, phenylalkyl, alkylphenyl, alkoxycarbonylalkyl; R7 = alkyl, alkenyl, (substituted) Ph, cycloalkyl, alkoxyalkyl; R8 = alkyl, (substituted) Ph, dialkylamino], were prepd. as serotonin 5-HT1F agonists for treatment of migraine (no data). Thus, 5-amino-3-(2-dimethylaminoethyl)benzothiophene, 4-fluorobenzoyl chloride, and pyridine were stirred in CH2Cl2 to give N-[3-(2-dimethylaminoethyl)benzothien-5-yl]-4-fluorobenzamide.

ΙT 206062-76-2P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzothienyl- and benzofurylamides as serotonin 5-HT1F agonists for treatment of migraine)

RN 206062-76-2 HCAPLUS

Urea, N-[3-(1-methyl-4-piperidinyl)-5-benzofuranyl]-N'-phenyl-, CN monohydrochloride (9CI) (CA INDEX NAME)

#### HC1

L20 ANSWER 9 OF 22 HCAPLUS COPYRIGHT 2002 ACS 1998:197401 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

128:257330

TITLE: Preparation of piperidinylindoles and related

compounds as serotonin 5-HT1F agonists

INVENTOR(S): Johnson, Kirk W.; Phebus, Lee A.

Eli Lilly and Company, USA; Johnson, Kirk W.; Phebus, PATENT ASSIGNEE(S):

Lee A.

PCT Int. Appl., 217 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

GΙ

Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	rent	NO.		KI	ND	D DATE APPLICATION NO.					DATE						
WO	9811	895		 A	1	1998	0326		W	0 19	97-U	S145	76	1997	0815		
	W:													CZ,			
					,	-		-	-					LS, SI,		•	•
	٠	TM,	TR,	TT,	-						•			BY,	•		•
	RW:	•	TJ, KE,		MW,	SD,	SZ,	UG,	ZW,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,
7. 53	0740					TD,			70.1	. 10	07.4	0740		1007		·	·
	9740 8326					1998 1998								19970 19970			
EP	8326									~-					~-		
	R:			•	-	FI,	-	FR,	GB,	GR,	IT,	ш1,	ъU,	NL,	SE,	MC,	PT,
PRIORITY	APP	LN.	INFO	. : ´	·	·								1996			
OTHER SO	OURCE	(S):			MAR	PAT	128:			99/-	US14.	576		1997	7812		

## BERNHARDT 09/896,278

AB Piperidinylindoles I (A-B = CHCH2, C:CH; X = H, halo, alkoxy, OH, etc.; n = 1-4; Ar = pyridinyl, pyrrolyl, pyrazolyl deriv.) were prepd. as serotonin 5-HT1F agonists, useful for the prevention of migraine. E.g., reaction of 5-benzyloxyindole and 4-piperidone hydrochloride gave 97.6% 5-benzyloxy-3-[1,2,5,6-tetrahydro-4-pyridinyl]-1H-indole. Hydrogenation/hydrogenolysis of the latter gave 5-hydroxy-3-(4-piperidinyl)-1H-indole oxalate. Also prepd. were tetrahydrocarbazoles and cyclohepta[7,6-b]indoles.

182562-63-6P 182562-71-6P 182562-72-7P 182562-73-8P 182562-75-0P 182562-76-1P 182562-77-2P 182562-78-3P 182562-79-4P 182562-80-7P 182562-81-8P 182562-82-9P 182562-89-6P 186708-24-7P 201857-34-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of piperidinylindoles and related compds. as serotonin 5-HT1F agonists)

RN 182562-63-6 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-phenyl- (9CI) (CA INDEX NAME)

RN 182562-71-6 HCAPLUS

CN Urea, N-(4-fluorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-72-7 HCAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-73-8 HCAPLUS

CN Urea, N-(4-methylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-75-0 HCAPLUS

CN Urea, N-(4-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl](9CI) (CA INDEX NAME)

RN 182562-76-1 HCAPLUS

CN Urea, N-(2-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-77-2 HCAPLUS CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[4-(methylthio)phenyl]- (9CI) (CA INDEX NAME)

RN 182562-78-3 HCAPLUS CN Urea, N-(3-acetylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-79-4 HCAPLUS
CN Benzoic acid, 4-[[[[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]amino]carbonyl]amino]-, butyl ester (9CI) (CA INDEX NAME)

RN 182562-80-7 HCAPLUS CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[3-(1-methyl-4-piperidinyl)-lH-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-81-8 HCAPLUS CN Urea, N-[1,1'-biphenyl]-4-yl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-82-9 HCAPLUS
CN Urea, N-(2,3-dichlorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl](9CI) (CA INDEX NAME)

RN 182562-89-6 HCAPLUS
CN Urea, N-methyl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N-phenyl(9CI) (CA INDEX NAME)

RN 186708-24-7 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 201857-34-3 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

L20 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2002 ACS

### BERNHARDT 09/896,278

ACCESSION NUMBER:

1998:124013 HCAPLUS

DOCUMENT NUMBER:

128:192544

TITLE:

Preparation of indole and carbazole derivatives as

serotonin agonists

INVENTOR(S):

Johnson, Kirk W.; Phebus, Lee A.

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA; Johnson, Kirk W.; Phebus,

Lee A.

SOURCE:

PCT Int. Appl., 271 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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KIND DATE
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      PATENT NO.
      WO 9806402 Al 19980219 WO 1997-US14097 19970812
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RW: GH, KE, LS, MW, SD, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
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                                                       BR 1997-11147
                                                                             19970812
      CN 1233180
                            Α
                                    19991027
                                                       CN 1997-198718 19970812
                                                       JP 1998-509943
                            T2
      JP 2000516233
                                                                            19970812
                                    20001205
      NO 9900701 A
                                                      NO 1999-701
                                                                              19990215
                                    19990416
PRIORITY APPLN. INFO.:
                                                    US 1996-24096 P 19960816
                                                    WO 1997-US14097 W 19970812
OTHER SOURCE(S): MARPAT 128:192544
GT
```

Title compds. I (A-B = CHCH2, C:CH; Ar = pyridinyl, pyrrolyl, AΒ (un) substituted pyrazolyl; X = H, halo, alkoxy, OH, benzyloxy, carboxamido, alkyl, alkylthio; p = 1-4), II (R = H, alkyl, naphthylalkyl, naphthylthioalkyl, phenylthioalkyl, etc.; R1 = H, alkyl; X = alkylthio, alkylcarbonyl, alkylsulfonylamido, etc.), III (R2 = H, alkyl, arylethyl; R3 = H, alkyl, arylethyl; X = OH, alkylcarbonylamino, alkylcarbonyl, etc.; m = 0-1; n = 1-2), IV (R2 = alky; R3 = alkyl, cycloalkyl, etc.; R4 = alkyl, phenyl; R5 = alkyl, cycloalkyl, (un) substituted Ph, naphthyl, etc.), and pharmaceutically acceptable acid salts were prepd. and methods for the treatment or amelioration of the symptoms of the common cold or allergic rhinitis which comprises administering the title compds. and salts to human as serotonin 5-HT agonists in both injectable and oral compns. were tested. N-(4-fluorobenzoly)-5-amino-3-(1-methylpiperidin-4-yl)-indole is the most preferred compd.

182562-71-6P 182562-72-7P 182562-73-8P IT

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

182562-75-0P 182562-76-1P 182562-77-2P 182562-78-3P 182562-80-7P 182562-81-8P

182562-82-9P 182562-89-6P 201857-34-3P

203710-00-3P 203710-01-4P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of indole and carbazole derivs. as 5-HT agonists)

RN 182562-71-6 HCAPLUS

CN Urea, N-(4-fluorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-72-7 HCAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[3-(1-methyl-4-piperidihyl)-1H-indol-5-yl](9CI) (CA INDEX NAME)

RN 182562-73-8 HCAPLUS

CN Urea, N-(4-methylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-75-0 HCAPLUS

CN Urea, N-(4-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-76-1 HCAPLUS

CN Urea, N-(2-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-77-2 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[4-(methylthio)phenyl]- (9CI) (CA INDEX NAME)

RN 182562-78-3 HCAPLUS

CN Urea, N-(3-acetylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-80-7 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-81-8 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-4-yl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl](9CI) (CA INDEX NAME)

RN 182562-82-9 HCAPLUS

CN Urea, N-(2,3-dichlorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-89-6 HCAPLUS

CN Urea, N-methyl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N-phenyl-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Ph & O \\ \hline & H \\ N \\ \hline \\ Me-N-C-NH \\ \end{array}$$

RN 201857-34-3 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

RN 203710-00-3 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 203710-01-4 HCAPLUS

CN Benzoic acid, 4-[[[[3-(1-methyl-4-piperidinyl)-1H-indol-5-

## BERNHARDT 09/896,278

yl]amino]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L20 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:55467 HCAPLUS

DOCUMENT NUMBER: 128:127937

TITLE: Preparation of 3-(4-piperidinyl)indoles as 5-HT1F

agonists

INVENTOR(S): Audia, James Edmund; Dressman, Bruce Anthony; Droste,

James Joseph; Fritz, James Erwin; Kaldor, Stephen Warren; Koch, Daniel James; Krushinski, Joseph Herman, Jr.; Nissen, Jeffrey Scott; Rocco, Vincent Patrick;

Schaus, John Mehnert; Thompson, Dennis Charles

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: U.S., 49 pp. Cont.-in-part of U.S. Ser. No. 407,553,

abandoned.

CODEN: USXXAM
T TYPE: Patent

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PAT	ENT I	NO.		KI		DATE			A.	PPLI	CATI	ои ис	ο.	DATE			
	CA	57080 22153 96290	322		A A	<u> </u>	1996	0926		C	A 19	96-22	21532	22	1996	0315		
			AL, KE,	AM, KG, NZ,	AU, KP,	AZ, KR,	BB, KZ,	BG, LK,	BR, LR,	BY, LS,	CA, LT,	CN, LV,	CZ, MD,	EE, MG,	GE, MK, TT,	HU, MN,	IS, MW,	MX,
		RW:	KE,				SZ,	UG,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,
	AU	96533	112	•	A.	1.	1996	1008		Αl	J 19	96-53	3112		1996	0315		
	ΑU	70232 1184	22		Βź	2	1999	0218										
	CN	1184	425		Α		1998	0610		Cl	N 19	96-19	93883	1	1996	0315		
	JΡ	11502	2816		$T_{2}$	2	1999	0309		J:	P 19	96-52	28501	1	1996	0315		
	AT	19833	32		E		2001	0115		A'	Г 19	96-30	01845	5	1996			
	ES	21530	078		$\mathbf{T}$	3	2001	0216		E	S 19	96-30	01845	5	1996	0319		
	BR	96010	061		Α		1998	0106		, Bi	R 19	96-10	061		1996	0320		
	NO	97042	220		Α		1997	1104		N	O 19	97-42	220		1997	0912		
	US	59624	474				1999			U	S 19	97-91	77526	6	1997	1124		
PRIOF	RITY	( APP	LN.	INFO.	. :				Į	US 1	995-	4075	53	В2	1995	0320		
										WO 1	996-	US350	00	M	1996	315		
									1	US 1	996-	61978	33	A3	1996	0320		

OTHER SOURCE(S): MARPAT 128:127937

GI

$$R^2$$
 $N-R$ 
 $R^1$ 

AB Title compds. (I; R,R1 = H or alkyl; R2 = PhS, alkanoyl, COPh, heteroarylcarbonyl, -carbamoyl, etc.; dashed line = optional bond) were prepd. Thus, 5-bromoindole was aminated by 1-methyl-4-piperidone and the product condensed with (MeONMe)2CO to give I (R = Me, R1 = H)(II; R2 = MeONMeCO) which was treated with 4-(MeO)C6H4Br/BuLi to give II [R2 = COC6H4(OMe)-4]. Data for biol. activity of I were given.

182562-71-6P 182562-72-7P 182562-73-8P 182562-75-0P 182562-76-1P 182562-77-2P 182562-78-3P 182562-79-4P 182562-80-7P 182562-81-8P 182562-82-9P 182562-89-6P 186708-24-7P 201857-34-3P

Ι

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 3-(4-piperidinyl)indoles as 5-HT1F agonists)

RN 182562-71-6 HCAPLUS

CN Urea, N-(4-fluorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-72-7 HCAPLUS CN Urea, N-(4-chlorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-73-8 HCAPLUS

CN Urea, N-(4-methylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-75-0 HCAPLUS

CN Urea, N-(4-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-76-1 HCAPLUS

CN Urea, N-(2-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-77-2 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[4-(methylthio)phenyl]- (9CI) (CA INDEX NAME)

RN 182562-78-3 HCAPLUS

CN Urea, N-(3-acetylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-79-4 HCAPLUS

CN Benzoic acid, 4-[[[[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]amino]carbonyl]amino]-, butyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\$$

RN 182562-80-7 HCAPLUS CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-81-8 HCAPLUS CN Urea, N-[1,1'-biphenyl]-4-yl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-82-9 HCAPLUS CN Urea, N-(2,3-dichlorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-89-6 HCAPLUS CN Urea, N-methyl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N-phenyl-(9CI) (CA INDEX NAME)

● HCl

L20 ANSWER 12 OF 22 HCAPLUS COPYRIGHT 2002 ACS

## BERNHARDT 09/896,278

1997:145241 HCAPLUS ACCESSION NUMBER:

126:157395 DOCUMENT NUMBER:

Process for parallel synthesis of a non-peptide TITLE:

library

Fritz, James E.; Kaldor, Stephen W. INVENTOR(S):

Lilly, Eli, and Co., USA; Fritz, James E.; Kaldor, PATENT ASSIGNEE(S):

Stephen W.

PCT Int. Appl., 59 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English 2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P.P	PATENT NO.			KIND DATE				APPLICATION NO. DATE									
					- <b>-</b>				_								
WC	9700	244		A1 19970103				W	0 19	96-U	S104	54	1996	0617			
	W:													CZ,			
														ΚZ,			
		LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,
		SE,															
	RW:													FI,	FR,	GB,	GR,
		ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM			
ΑÜ	J 9663	861		A													
PRIORIT	Y APP	LN.	INFO	.:			•		US 1	995-	310		P	1995	0619		
									US 1	995-	4922	77	A2	1995	0619		
														1996	0617		
OTHER S	SOURCE	(S):			CAS	REAC'	Т 12	6:15	7395	; MA	RPAT	126	:157	395			

AΒ A process for the sequential prepn. of a library of compds. having pharmaceutical usage is claimed. The process is specifically applicable to indole derivs. R2N(A)XR1 [I; wherein A = indole analog; X = bond, CO, CS; R1 = H, alkyl, aryl, cycloalkyl, heterocyclyl, NR3R4, or OR5; R2, R3, R4 = H, alkyl, aryl, cycloalkyl, heterocyclyl, or their substituted analogs; R1 .noteq. R2 when X = bond; R5 = H, alkyl, aryl, cycloalkyl, or their substituted analogs]. The process involves the sequential mixing of soln. phase reagents, followed by scavenging of excess unreacted reagents with solid phase scavenging agents. The process is highly iterative and applicable to prodn. of various ureas, thioureas, amides, carbonates and tertiary amines. For example, 5-amino-3-(1-methylpiperidin-4-yl)-1Hindole reacted with ClCOEt in CH2Cl2 in the presence of polyvinylpyridine at room temp. for 2 days. The mixt. was treated with aminomethylated polystyrene for 18 h and evapd. to give 84% title compd. II. Over 50 compds. I were prepd. In selectivity tests against 4 serotonin receptor subtypes, II had a Ki value of 2.8 nM at 5-HT1F receptors, vs. 6.1 nM at 5-HT1A, 38.3 nM at 5-HT1D.alpha., and 182.8 nM at 5-HT1D.beta. receptors.

#### BERNHARDT 09/896,278

A study of sumatriptan succinate and 4 other compds. at 4 receptor subtypes is also described, with the binding at 5-HTlF receptors showing a 0.94 correlation factor to inhibition of protein extravasation.

IT 182562-71-6P 182562-72-7P 182562-73-8P 182562-75-0P 182562-76-1P 182562-77-2P

182562-78-3P 182562-79-4P 182562-80-7P

182562-81-8P 182562-82-9P 182562-89-6P

186708-24-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(parallel synthesis of indole deriv. library as 5-HT1F agonists)

RN 182562-71-6 HCAPLUS

CN Urea, N-(4-fluorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-72-7 HCAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-73-8 HCAPLUS

CN Urea, N-(4-methylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-75-0 HCAPLUS

CN Urea, N-(4-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-76-1 HCAPLUS

CN Urea, N-(2-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl](9CI) (CA INDEX NAME)

RN 182562-77-2 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[4-(methylthio)phenyl]- (9CI) (CA INDEX NAME)

RN 182562-78-3 HCAPLUS
CN Urea, N-(3-acetylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl](9CI) (CA INDEX NAME)

RN 182562-79-4 HCAPLUS
CN Benzoic acid, 4-[[[[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]amino]carbonyl]amino]-, butyl ester (9CI) (CA INDEX NAME)

RN 182562-80-7 HCAPLUS CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)

RN 182562-81-8 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-4-yl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-82-9 HCAPLUS

CN Urea, N-(2,3-dichlorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-89-6 HCAPLUS

CN Urea, N-methyl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N-phenyl-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Ph & O \\ & \parallel \\ Me-N-C-NH \end{array}$$

RN 186708-24-7 HCAPLUS

# BERNHARDT 09/896,278

Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[3-CN (trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

L20 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:646482 HCAPLUS

125:275668 DOCUMENT NUMBER:

Preparation of 3-(4-piperidyl)indoles and analogs as TITLE:

5-HT1F agonists

Audia, James Edmund; Dressmann, Bruce Anthony; Droste, INVENTOR(S):

James Joseph; Fritz, James Erwin; Kaldor, Stephen Warren; Koch, Daniel James; Krushinski, Joseph Herman Jr; Thompson, Dennis Charles; Nissen, Jeffrey Scott;

et al.

Lilly, Eli, and Co., USA PATENT ASSIGNEE(S):

Eur. Pat. Appl., 82 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT :	NO.		KI	ND	DATE			A	PPL	IC	)ITA	й ис	ο.	DATE				
	7336 7336								E	P 1	.99	6-30	0184	5	1996	0319			
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB	, (	GR,	ΙE,	ΙT,	LI,	LU,	NL,	PT,	SE
CA	2215	322		A.	A	1996	0926		C	A 1	99	6-22	2153	22	1996	0315			
WO	9629	075		A.	1	1996	0926		M	10 1	99	6-US	350	0	1996	0315			
	W:	ΑL,	AM,	ΑU,	ΑZ,	BB,	BG,	BR,	BY,	CA	, (	CN,	CZ,	EE,	GΕ,	ΗU,	IS,	JP,	
		ΚE,	KG,	ΚP,	KR,	KZ,	LK,	LR,	LS,	LT	', ]	LV,	MD,	MG,	MK,	MN,	MW,	MX,	
		NO,	NZ,	PL,	RO,	RU,	SD,	SG,	SI,	SK	, :	ГJ,	TM,	TR,	TT,	UA,	UG,	US,	
		UZ,																	
	RW:	KE,	LS,	MW,	SD,	SZ,	UG,	BF,	ВJ,	CF	', (	CG,	CI,	CM,	GΑ,	GN,	ML,	MR,	
			SN,																
AU	9653	112		A.	1	1996	1008		P	U 1	99	6-53	3112		1996	0315			
ΑU	7023	22		B	2	1999	0218												
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JP	1150	2816		T	2	1999	0309		J	FP 1	99	6-52	2850	1	1996	0315			
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ES	2153	078		T	3	2001	0216		E	S 1	99	6-30	0184	5	1996				
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NO	9704	220		Α		1997	1104		N	10 1	99	7-42	220		1997	0912			
RITY	APP	LN.	INFO.	. :				Ţ	JS 1	.995	-4	075	53	Α	1995	0320			
								Ţ	WO 1	.996	-U	S35(	00	W	1996	0315			
9 90	אנזסכב	191 .			MAE	יי עם	125.	2756	68										

OTHER SOURCE(S): MARPAT 125:275668

GΙ

Title compds. [I; R,R1 = H or alkyl; R9 = SR2, COR3, CONHR4, etc.; R2 = AB phenyl(alkyl), pyridyl, etc.; R3 = alkyl, phenyl(alkyl), heteroaryl, etc.; R4 = (un)substituted heteroaryl(alkyl), etc.; dashed line = optional bond] were prepd. Thus, 5-fluoro-3-(4-piperidinyl)-1H-indole was condensed with 1-methyl-4-(2-methanesulfonyloxyethyl)pyrazole (prepn. each given) to give title compd. II. Data for biol. activity of selected I were given.

182562-63-6P 182562-71-6P 182562-72-7P IT 182562-73-8P 182562-74-9P 182562-75-0P 182562-76-1P 182562-77-2P 182562-78-3P 182562-79-4P 182562-80-7P 182562-81-8P 182562-82-9P 182562-89-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of 3-(4-piperidyl)indoles and analogs as 5-HT1F agonists)

RN 182562-63-6 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-phenyl- (9CI) INDEX NAME)

182562-71-6 HCAPLUS RN

Urea, N-(4-fluorophenyl)-N'-[3-(1-meth vl-4-piperidinyl)-1H-indol-5-yl]-CN (9CI) (CA INDEX NAME)

RN 182562-72-7 HCAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl](9CI) (CA INDEX NAME)

RN 182562-73-8 HCAPLUS

CN Urea, N-(4-methylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-74-9 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 182562-75-0 HCAPLUS

CN Urea, N-(4-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-76-1 HCAPLUS

CN Urea, N-(2-methoxyphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-77-2 HCAPLUS

CN Urea, N-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N'-[4-(methylthio)phenyl]- (9CI) (CA INDEX NAME)

RN 182562-78-3 HCAPLUS

CN Urea, N-(3-acetylphenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl](9CI) (CA INDEX NAME)

RN 182562-79-4 HCAPLUS

CN Benzoic acid, 4-[[[[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]amino]carbonyl]amino]-, butyl ester (9CI) (CA INDEX NAME)

RN 182562-80-7 HCAPLUS

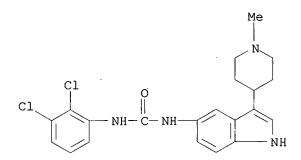
CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl](9CI) (CA INDEX NAME)

RN 182562-81-8 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-4-yl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

RN 182562-82-9 HCAPLUS

CN Urea, N-(2,3-dichlorophenyl)-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-(9CI) (CA INDEX NAME)



RN 182562-89-6 HCAPLUS

CN Urea, N-methyl-N'-[3-(1-methyl-4-piperidinyl)-1H-indol-5-yl]-N-phenyl-(9CI) (CA INDEX NAME)

L20 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:385402 HCAPLUS

DOCUMENT NUMBER: 125:166898

TITLE: A simple one-pot preparation of N, N'-unsymmetrical

ureas from N-Boc protected primary anilines and amines

AUTHOR(S): Lamothe, Marie; Perez, Michel; Colovary-Gotteland,

Veronique; Halazy, Serge

CORPORATE SOURCE: Medicinal Chem. Div., Cent. Recherche Pierre Fabre,

Castres, 81106, Fr.

SOURCE: Synlett (1996), (6), 507-508

CODEN: SYNLES; ISSN: 0936-5214

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:166898

AB N-Boc protected primary amines and anilines can be converted efficiently

into N, N'-unsym. substituted ureas RNHCONR'R" (R = Ph,

7-methoxy-1-naphthyl, PhCH2CH2, etc.) by sequential deprotonation and

condensation with amines HNR'R" at 65.degree..

IT 180605-37-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of unsym. ureas from urethane-protected amines and anilines)

RN 180605-37-2 HCAPLUS

CN Urea, N-[2-(4-methyl-1-piperazinyl)phenyl]-N'-phenyl- (9CI) (CA INDEX NAME)

Crm

L20 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1996:307338 HCAPLUS

DOCUMENT NUMBER:

124:343334

TITLE:

Novel compositions containing sertraline and a 5-HT1D

receptor agonist or antagonist

INVENTOR(S):

Chenard, Bertrand L.; Howard, Harry R.; Macor, John

E.; Schulz, David W.; Sprouse, Jeffrey S.

PATENT ASSIGNEE(S):

Pfizer Inc., USA

SOURCE:

Eur. Pat. Appl., 51 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT	NO.		KI	ND	DATE			AP	PLIC	CATIO	о ис	ο.	DATE				
		7018 7018			 А: А:	_	1996 1999			EP	199	95-30	0624	9	1995	0907		•	
		7018			В	1	2000	0816											
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	ΙΤ,	LI,	LU,	ΝL,	PT,	SE	
	US	5597	826		Α		1997	0128		US	199	94-30	0623	0	1994	0914			
	ΑT	1954	29		E		2000	0915		ΑT	199	95-30	0624	9	1995	0907			
	ES	2148	445		T	3	2000	1016		ES	199	95-30	0624	9	1995	0907			
	CA	2158	108		A	A	1996	0315		CA	199	95-2	1581	80	1995	0912			
	CA	2158	108		С		1999	0316											
	JP	0810	9130		A.		1996	0430		JР	199	95-23	3695	1	1995	0914			
PRIOF	RITY	APP	LN.	INFO	. :				Ţ	JS 19	94-3	3062	30	Α	1994	0914		,	
OTHER	R SC	URCE	(S):			MAI	RPAT	124:3	34333	34									
GT			, ,													,			

$$R^{2}$$
 $Q^{1} = N$ 
 $NR$ 

Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

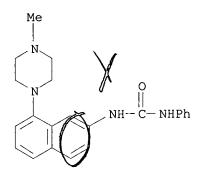
IT 163465-10-9P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperazinylnaphthalene derivs. as central nervous system agent for use in combination with sertraline)

RN 163465-10-9 HCAPLUS

CN Urea, N-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]-N'-phenyl- (9CI) (CA INDEX NAME)



L20 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1995:594280 HCAPLUS

DOCUMENT NUMBER:

123:9462

TITLE:

Preparation of heterocyclylaryl amides and ureas as

5-HT1D receptor antagonists

INVENTOR(S):

Duckworth, David Malcolm; Gaster, Laramie Mary; Jenkins, Sarah Margaret; Jennings, Andrew John;

Mulholland, Keith Raymond

PATENT ASSIGNEE(S):

SmithKline Beecham PLC, UK

SOURCE:

PCT Int. Appl., 24 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9506044	A1	19950302	WO 1994-EP2662	19940809
W: JP,	US	•		
RW: AT,	BE, CH, DE	, DK, ES, FR,	GB, GR, IE, IT, LU,	MC, NL, PT, SE
EP 714389	A1	19960605	EP 1994-925446	19940809
EP 714389	B1	19980617		
R: BE,	CH, DE, FR	, GB, IT, LI,	NL	
JP 09504004	Т2	19970422	JP 1994-507309	19940809
US 5905080	A	19990518	US 1996-596223	19960215
PRIORITY APPLN. 3	INFO.:	1	GB 1993-17328	19930820

### BERNHARDT 09/896,278

GB 1993-17333	19930820
GB 1993-18186	19930902
GB 1993-22630	19931103
WO 1994-EP2662	19940809

OTHER SOURCE(S): MARPAT 123:9462

GI For diagram(s), see printed CA Issue.

Title compds. I (P = Ph, 5-7-membered heterocyclyl contg. 1-3 of O, N, S; R1 = H, halo, C1-6 alkyl, C3-6 cycloalkyl, C1-6 alkoxy, HO, NC, acyl, F3C, HS, H2N, etc.; R2 = H, halo, C1-6 alkyl, C1-6 alkoxy, acyl, O2N, etc.; R3 = H, halo, C1-6 alkyl, C1-6 alkoxy; R4 - H, C1-6 alkyl; A = HN, C1-6 acyclyl; n = 1,2) or a salt thereof useful as 5-HT1D antagonists (no data), are prepd. 4-Bromophenylacetic acid was converted to the acid chloride and treated with 4-methoxy-3-(4-methyl-1-piperazinyl)benzenamine to give I (P = C6H4, R1 = H, R2 = Br, R3 = p-MeO, R4 = Me, A = CH2, n = 1). Pharmaceutical compns. contg. I are claimed.

IT 163620-39-1P 163620-40-4P 163620-41-5P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclylaryl amides and ureas as 5-HT1D receptor antagonists)

RN 163620-39-1 HCAPLUS

RN 163620-40-4 HCAPLUS

CN Urea, N-(4-bromo-3-methylphenyl)-N'-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 163620-41-5 HCAPLUS

CN Urea, N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-N'-[3-methyl-4-(4-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

L20 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1995:580492 HCAPLUS

DOCUMENT NUMBER:

122:314570

TITLE:

Preparation of heterocyclylnaphthalene derivatives as

serotonin 5-HT1 agonists and antagonists.

INVENTOR(S):

Chenard, Bertrand L.; Macor, John E.; Segelstein,

Barbara E.

PATENT ASSIGNEE(S):

Pfizer Inc., USA

SOURCE:

PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.			KIND DATE			APPLICATION NO.					NO:	DATE					
		9421	619		A	1	1994								1994	0215		
			ΑU,												MC,	NIT	ייים	C F
	70 11 7														1994		ш,	25
	EΡ	6895	36		A	1	1996	0103		E	P 1	994-	9113	77	1994	0215		
	EΡ	6895	36		В	1	2001	0523										
															, LU,		PT,	SE
	JP	0850	3228		$\mathbf{T}$	2	1996	0409		J	P 1	994-	5210	19	1994	0215		
							2001	0816		Ε	S 1	994-	9113	77	1994	0215		
	HU	6731	.2		A.	2	1995	0328		Н	U 1	994-	760		1994	0312		
			.213				1994	0917		F	I 1	994-	1213		1994	0315		
			457					0929		С	A 1	994-	2158	457	1994	0315		
	ZΑ	9401	806		Α		1995	0915		Z	A 1	994-	1806		1994	0315		
	US	2001	.0046	69	Α	1	2001	0621		U	S 2	001-	7580	74	2001	0110		
PRIOF	RIT!	APP	LN.	INFO	.:				į	US ·1	993	-320	42	Α	1993	0316		
									1	WO 1	994	-US1	206	W	1994	0215		
									1	US 1	995	-522	349	В1	1995	0915		
OTHER	8 50	DURCE	(S):			MAR	RPAT	122:3	3145	70								

GI

R2

$$Q1 = -N$$
 $NR3$ 
 $Q2 = -NR3$ 
 $Q2 = -NR3$ 
 $Q3 = -NR3$ 
 $Q4 = -NR3$ 
 $Q4 = -NR3$ 
 $Q4 = -NR3$ 
 $Q5 = -NR3$ 
 $Q5 = -NR3$ 
 $R12 = -NR3$ 
 $R12 = -NR3$ 
 $R12 = -NR3$ 
 $R12 = -NR3$ 
 $R13 = -NR3$ 

Title compds. [I; R1 = Q1-Q3, etc.; R2 = R4, OR4, OS(O)2R4, NR4R5, AB R4(CH2)bNH(C:X)(CH2)c, R4(CH2)bO(C:O)NH(CH2)c(C:O)NH, R4(C:O)NH(C:O)NH, (CH2)bNH(C:X)(CH2)bO(C:O)(CH2)cR4, NH(C:X)NHR4, R4O(C:O)O, O(C:O)NHR4, R4O(C:O)NH, (CH2)b(C:O)(CH2)cR4, NHS(O)2R4, C(OH)R4R5, CH(OH)R4, (C:O)NR4R5, CN, NO2, substituted alkyl, (substituted) alkenyl, alkynyl; R3 = H, alkyl, alkylaryl, aryl; R4, R5 = Q4, Q5, H, CF3, alkyl, alkylaryl, etc.; R6-R14 = H, halo, CF3, CN, NO2, aryl, alkylaryl, alkyl, alkenyl, alkynyl, OR20, COR20, NR20R21, etc.; adjacent pairs of R6-R14 = atoms to form 5-7 membered rings; R20, R21 = H, alkyl, aryl, alkylaryl; R20R21 = atoms to form 4-7 membered rings; A, B, D, E, F, L = C, N; G, I, J, K = C, N, O, S, C:O; X = O, S; a = 0-2; b, c = 0-6; dotted line = optional double bond; with provisos], were prepd. These compds. are useful psychotherapeutics and are potent serotonin (5-HT1) agonists and antagonists and may be used in the treatment of depression, anxiety, eating disorders, obesity, drug abuse, cluster headache, migraine, pain and chronic paroxysmal hemicrania and headache assocd. with vascular disorders, and other disorders arising from deficient serotonergic neurotransmission. The compds. can also be used as centrally acting antihypertensives and vasodilators. Thus, 7-amino-.alpha.-tetralone was stirred with PhCOCl/Et3N in THF to give 85% 7-benzamido-.alpha.-tetralone. This in THF at -78.degree. was treated with N-methylpiperazine and TiCl4 to give 83% 7-benzamido-1-(4-methyl-1-piperazinyl)-3,4-dihydronaphthalene. The latter was refluxed with Pd/C in xylene to give title compd. 7-benzamido-1-(4-methyl-1-piperazinyl)naphthalene and 7-benzamido-1-(4methyl-1-piperazinyl)-1,2,3,4-tetrahydronaphthalene. I showed IC50 <0.60 nM for 5-HT1A and/or 5-HT1D affinity.

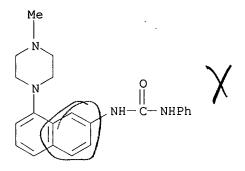
IT 163465-10-9P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclylnaphthalene derivs. as serotonin 5-HT1 agonists and antagonists)

RN 163465-10-9 HCAPLUS

CN Urea, N-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]-N'-phenyl- (9CI) (CAINDEX NAME)



L20 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:289966 HCAPLUS

DOCUMENT NUMBER: 122:81372

TITLE: Preparation of cyclic urea derivatives as drugs

INVENTOR(S): Himmelsbach, Frank; Austel, Volkhard; Linz, Guenter;

Pieper, Helmut; Guth, Brian; Mueller, Thomas;

Weisenberger, Johannes

PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H., Germany

SOURCE: Eur. Pat. Appl., 125 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

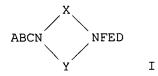
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	EP 587134 EP 587134		19940316 19940706	EP 1993-114401	19930908
				GB, GR, IE, IT, LI	
	DE 4230470	A1	19940414	DE 1992-4230470	19920911
	DE 4302052	A1	19940728	DE 1993-4302052	19930126
	DE 4309213	A1	19940929	DE 1993-4309213	19930322
	FI 9303942	Α	19940312	FI 1993-3942	19930909
	CA 2105934	AA	19940312	CA 1993-2105934	19930910
	NO 9303248	Α	19940314	NO 1993-3248	19930910
	AU 9346249	A1	19940324	AU 1993-46249	19930910
	ZA 9306689	A	19950310	ZA 1993-6689	19930910
	HU 71496	A2	19951128	ни 1993-2577	19930910
	US 5681841		19971028	US 1993-120008	19930910
	CN 1092769	Α	19940928	CN 1993-114711	19930911
	JP 06263740	A2	19940920	JP 1993-226864	19930913
	US 5880284	A	19990309	US 1997-864528	19970528
PΕ	RIORITY APPLN. INFO.	:	D	E 1992-4230470	19920911
			D	E 1993-4302052	19930126
			D	E 1993-4309213	19930322
			Ü	S 1993-120008	19930910

OTHER SOURCE(S): MARPAT 122:81372

GI



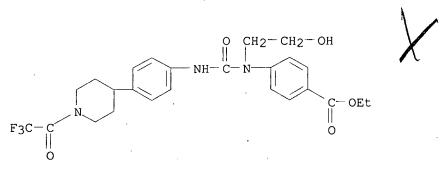
Title compds. [I; A = e.g., acylamidino, etc.; B = e.g., AΒ 1,4-azacycloheptylene, 1,4- piperidinylene, 1,4-piperazinylene, etc.; C = e.g., 1,4- piperidinylene, 1,2,3,4-tetrahydro-2,6-naphthylene, 1,4-bicyclo[2.2.2]octanylene, etc.; D = alkylene, 1,3-phenylene, 1,4-cyclohexylene, etc.; E = bond, CH:CH, alkylene, etc.; F = CO2H, alkoxycarbonyl, etc.; X = e.g., N-cyanocarbimino, etc.; Y = e.g., 1,2-cyclohexylene] were prepd. as cell aggregation inhibitors. Thus, 2-(4-amidinophenyl)-4-[4-[2-(cyclohexyloxycarbonyl)ethyl]phenyl]-5-methyl-4H-1,2,4-triazol-3-one hydrochloride inhibited ex vivo thrombocyte aggregation in blood from rhesus monkeys after oral administration of 1mg/kg.

IT 160132-62-7P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction of, in prepn. of cell aggregation inhibitor)

RN 160132-62-7 HCAPLUS

Benzoic acid, 4-[(2-hydroxyethyl)[[[4-[1-(trifluoroacetyl)-4-CN piperidinyl]phenyl]amino]carbonyl]amino]-, ethyl ester (9CI) (CA INDEX



L20 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:497163 HCAPLUS

DOCUMENT NUMBER: 111:97163

Synthesis of 1'-substituted 2-aminospiro[4H-3,1-TITLE:

benzoxazine-4,4'-piperidine] derivatives

AUTHOR(S): Takai, Haruki; Obase, Hiroyuki; Teranishi, Masayuki

CORPORATE SOURCE:

Tokyo Res. Lab., Kyowa Hakko Kogyo Co., Ltd., Tokyo,

194, Japan SOURCE:

Chem. Pharm. Bull. (1988), 36(12), 4671-7

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 111:97163

NHCONHR
$$R^{2}$$

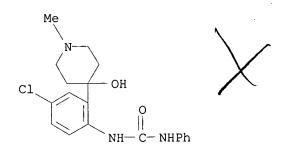
In the cyclization reaction of 4-hydroxy-4-[2-(N-substituted carbamoyl)aminophenyl]piperidine derivs. I (R = Me, R1 = CH2Ph, R2 = H, C1; R = R1 = Me, R2 = C1; R = Et, Ph, R1 = Me, R2 = C1) by treatment with acid, 2-aminospiro[4H-3,1-benzoxazine-4,4'-piperidine] derivs. II (same R's) were obtained. One of the products, 2-methylaminospiro[4H-3,1-benzoxazine-4,4'-piperidine] II (R = Me, R1 = R2 = H) was converted to 1-(2-hydroxy-2-phenethyl)-2-methylaminospiro[4H-3,1-benzoxazine-4,4'-piperidine] derivs. II [R = Me, R1 = CH2CH(OH)C6H4R3, R2 = H, R3 = 4-C1, 3,4-(OMe)2], which are our target compds. for pharmacol. screening tests on antihypertensive activity. However, these compds. did not show any remarkable antihypertensive activity.

IT 85732-65-6P 121060-58-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and acid-catalyzed cyclization of)

RN 85732-65-6 HCAPLUS

CN Urea, N-[4-chloro-2-(4-hydroxy-1-methyl-4-piperidinyl)phenyl]-N'-phenyl-(9CI) (CA INDEX NAME)



RN 121060-58-0 HCAPLUS

CN Urea, N-[4-chloro-2-(4-hydroxy-1-methyl-4-piperidinyl)phenyl]-N'-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

L20 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2002 ACS

1985:132069 HCAPLUS ACCESSION NUMBER:

102:132069 DOCUMENT NUMBER:

TITLE: [[4-[4-(4-Phenyl-1-piperazinyl)phenoxymethyl]-1,3-

dioxolan-2-yl]methyl]-1H-imidazoles and

1H-1,2,4-triazoles

Heeres, Jan; Stokbroekx, Raymond A.; Backx, Leo J. J. Janssen Pharmaceutica N. V., Belg. INVENTOR(S):

PATENT ASSIGNEE(S):

Eur. Pat. Appl., 113 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 118138 EP 118138	A1 B1	19840912 19890614	EP 1984-200092	19840124
R: AT, BE,	CH, DE		I, LI, LU, NL, SE	
US 4619931	À	19861028	US 1984-569122	19840109
AT 44030	E	19890615	AT 1984-200092	19840124
CA 1271194	A1	19900703	CA 1984-447194	19840210
JP 59172486	A2	19840929	JP 1984-32768	19840224
JP 07042285	B4	19950510		
DK 8401070	Α	19840829	DK 1984-1070	19840227
DK 164454	В	19920629		
DK 164454	С	19921109		
FI 8400781	Α	19840829	FI 1984-781	19840227
FI 82043	В	19900928		
FI 82043	C	19910110		
NO 8400735	Α	19840829	NO 1984-735	19840227
NO 160138	В	19881205		
NO 160138	С	19890315		
AU 8425097	A1	19840906	AU 1984-25097	19840227
AU 559461	В2	19870312		
ZA 8401449	A	19851030	ZA 1984-1449	19840227
IL 71066	A1	19871220	IL 1984-71066	19840227
ES 530138	A1	19850516	ES 1984-530138	19840228
ES 530140	A1	19850601	ES 1984-530140	19840228
ES 530139	A1	19850901	ES 1984-530139	19840228
US 4735942	A	19880405	US 1986-869537	19860602

## BERNHARDT 09/896,278

	8702221	A	19840829		ИО	1987-2221	19870527
NO		В	19900417				
NO		C	19900725		110	1000 154172	10000000
	4861879	A	19890829			1988-154173	19880209
CA	1309412	A2	19921027		-	1989-615528	19891025
FI	84058 .	В	19910628		FI	1989-5089	19891026
FI	84058	С	19911010				
NO	9000396	Α	19840829		ΝО	1990-396	19900129
ИО	173866	В	19931108				
NO	173866	С	19940216				
JР	05246999	A2	19930924		JР	1991-24132	19910124
JP	07064823	В4	19950712				
DK	9100783	A	19910429		DK	1991-783	19910429
	9101088	A	19910607		DK	1991-1088	19910607
	166673	B1	19930628				
	Y APPLN. INFO.:			US	198	33-470405	19830228
11(101(11	1 1111 2000 2001 0000			US	198	34-569122	19840109
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						34-447194	19840210
				FI		34-781	19840227
				NO		34-735	19840227
						36-869537	19860602
	OHDOD (O)	<b>C D</b>	CDEACE 102.1			0-009037	19000002

OTHER SOURCE(S):

CASREACT 102:132069

GΙ

Over 300 title compds. I [R = (un)substituted Ph; R1 = H, alkyl; R2 = urea, thiourea, amido, 5-membered N-contg. heterocycle; X = N, CH] and their intermediates, useful as pharmaceutical fungicides, were prepd. Thus, aniline deriv. II (R3 = H) was treated with ClCO2Ph to give II (R3 = CO2Ph). At 2.5 mg/kg orally, daily for 3 days in rats, II (R3 = CO2Ph) controlled Candida albicans at the 14th day after infection.

IT 95116-56-6P 95116-57-7P 95116-61-3P

95116-62-4P 95116-76-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and pharmaceutical fungicidal activity of)

RN 95116-56-6 HCAPLUS

CN Urea, N-[4-[4-[4-[2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-1]

dioxolan-4-yl]methoxy]phenyl]-1-piperazinyl]phenyl]-N'-(4-nitrophenyl)-,
cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A

PAGE 2-A

RN 95116-57-7 HCAPLUS

CN Urea, N-(2-chlorophenyl)-N'-[4-[4-[4-[4-[2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]-1-piperazinyl]phenyl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A

PAGE 2-A

RN 95116-61-3 HCAPLUS

CN Urea, N-[4-[4-[4-[2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]-1-piperazinyl]phenyl]-N'-(4-methylphenyl)-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

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PAGE 2-A

RN 95116-62-4 HCAPLUS

CN Urea, N-[4-[4-[4-[2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]-1-piperazinyl]phenyl]-N'-phenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 95116-76-0 HCAPLUS

CN Urea, N-(3-chlorophenyl)-N'-[4-[4-[4-[2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]-1-piperazinyl]phenyl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

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L20 ANSWER 21 OF 22 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1983:470751 HCAPLUS

DOCUMENT NUMBER:

99:70751-

TITLE:

Piperidine derivatives and pharmaceutical compositions

containing them

INVENTOR(S):

Teranishi, Masayuki; Obase, Hiroyuki; Takai, Haruki;

Shuto, Katsuichi; Karasawa, Akira; Kasuya, Yutaka

PATENT ASSIGNEE(S):

Kyowa Hakko Kogyo Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 79 pp.

DOCUMENT TYPE:

CODEN: EPXXDW

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	EP 70171	A1	19830119	EP 1982-303623	19820709
	EP 70171	B1	19861015		
	R: DE, FR,	GB, IT			
	JP 58015979	A2	19830129	JP 1981-108668	19810711
PRIOR	RITY APPLN. INFO.	.:		JP 1981-108668	19810711
GT					

Spiropiperidines I [R = H, (un)] substituted alkyl; R1 = H, alkyl, halogen,AB OH, alkanoyloxy; the benzene ring may be substituted; X = O, NR2; R2 = H, alkyl, (un) substituted Ph] were prepd. Thus 4-ClC6H4NHCOCMe3 was treated with BuLi and 1-benzyl-4-piperidine to give piperidine II (R3 = C1, R4 = COCMe3, R = CH2Ph) which was hydrogenated on Pd-C and hydrolyzed to form II (R = CH2Ph, R3 = R4 = H). The latter compd. was cyclized with carbonyldiimidazole to yield the spirobenzoxazinepiperidine III (R = CH2Ph) which gave III (R = H) on hydrogenolysis. Treatment of III (R = H) with 3,4-(MeO)2C6H3COCH2Br formed III [R = CH2COC6H3(OMe)2-3,4] which was reduced to yield III [R = CH2CH(OH)C6H3(OMe)2-3,4; IV]. IV reduced blood pressure by 95 mmHg in rats at 30 mg/kg orally.

ΙT 85732-65-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and cyclization of)

85732-65-6 HCAPLUS RN

Urea, N-[4-chloro-2-(4-hydroxy-1-methyl-4-piperidinyl)phenyl]-N'-phenyl-CN

#### (9CI) (CA INDEX NAME)

L20 ANSWER 22 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1980:550210 HCAPLUS

DOCUMENT NUMBER: 93:150210

TITLE: Search for potent anthelmintics. Part XI.

N1-p-[4-(Phenyl/p-tolyl)-1-piperazino]phenyl-N3-

alkyl/aryl ureas and thioureas

AUTHOR(S): Husain, M. Imtiaz; Shukla, M. K.; Singh, S. P.

CORPORATE SOURCE: Dep. Chem, Lucknow Univ., Lucknow, 226 007, India

SOURCE: J. Indian Chem. Soc. (1979), 56(9), 919-20

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB Twenty new piperazinophenylureas I (R = H, Me; R1 = alkyl, aryl; X = O, S) were prepd. by the condensation of the phenyl(aminophenyl)piperazine with various isocyanates or isothiocyanates in dry benzene. Out of the six compds. screened against H. nana infections in mice, one reduced the worm population by 40%.

IT 74840-28-1P 74840-29-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 74840-28-1 HCAPLUS

CN Urea, N-phenyl-N'-[4-(4-phenyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 74840-29-2 HCAPLUS

CN Urea, N-[4-[4-(4-methylphenyl)-1-piperazinyl]phenyl]-N'-phenyl- (9CI) (CA INDEX NAME)